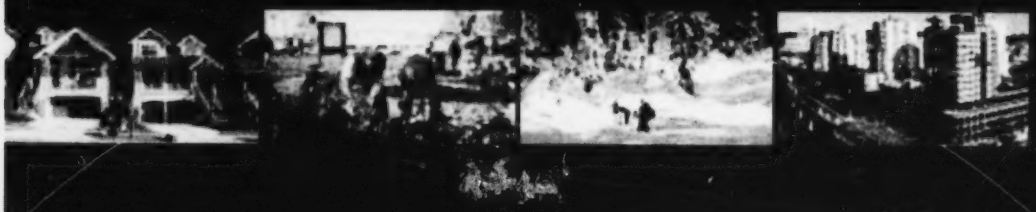


2002 Annual Report

Livable Region Strategic Plan

GREATER VANCOUVER REGIONAL DISTRICT
POLICY AND PLANNING DEPARTMENT

Summary

The Livable Region Strategic Plan (LRSP) is Greater Vancouver's regional growth strategy and was adopted by all member municipalities in 1996. The four main objectives of the LRSP are:

- Protect the Green Zone
- Build Complete Communities
- Achieve a Compact Metropolitan Region
- Increase Transportation Choice

The Local Government Act requires regional districts to prepare an annual report on implementation and progress in achieving their regional growth strategy objectives. The 2002 Annual Report uses both quantitative and qualitative information to track progress in achieving each of the four main objectives and accompanying policies contained in the LRSP.

The Annual Report includes a number of indicators to help track progress - these are found in Appendix A. The accompanying chart summarizes some of the key indicators.

Protect the Green Zone

The Green Zone is approximately 205, 000 hectares. The area of the Agricultural Land Reserve permitted to be excluded in 2002 was 90 hectares, with the area of ALR comprising approximately 53,700 hectares. The Annual Report documents the many efforts by member municipalities, the GVRD, and voluntary organizations to protect and enhance the Green Zone.

Build Complete Communities

The LRSP identifies the building of a network of centres across the region as one of the best ways to accomplish the complete communities objective. The Metropolitan Core and Greater Vancouver's eight regional town centres are the focus for high density residential, major region-serving employment, retail, cultural and community facilities. These centres act as a hub for subregional and regional road and transit access.

Almost all of the regional town centres have experienced considerable growth in the number of new dwellings in recent years. Between 1996 and 2001, almost 17,000 units have been added to the regional town centres and 15,000 units have been added to the Metropolitan Core (Downtown Vancouver and Central Broadway). For office space, the metropolitan core continues to attract new office space, but in suburban areas, the regional town centres have not been as successful as the business park locations.

Many examples of municipal actions to promote housing diversity, especially affordable housing options, are documented in the annual report.

Achieve a Compact Metropolitan Region

The LRSP identifies an area known as the Growth Concentration Area (GCA) to be the focus for metropolitan growth (The GCA consists of the City of Vancouver, UBC and environs, Burnaby, and New Westminster, Coquitlam, Port Coquitlam, Port Moody, and Anmore, and North Surrey/North Delta.) By focusing growth in the Growth Concentration Area, development pressure on the Green Zone is reduced, a better jobs/housing balance can be achieved, and the more concentrated settlement pattern helps support transportation choice and assists in more cost-effective transportation and utility infrastructure.

The LRSP has a target of approximately 70 per cent of the total regional population and employment contained within the GCA in the year 2021. As of the 2001 Census, 67 per cent of the population resided within the GCA. From 1996 to 2001, the GCA population increased by 112,800 residents, accommodating 73 per cent of the region's population growth. The GCA contains 46 per cent of the total urban area within the region.

This Annual Report shows many examples of major developments within the GCA that are served by SkyTrain or express bus routes- these include the new communities at UBC and SFU, a major residential community at Collingwood Village on the Expo line, residential and commercial developments at Brentwood on the Millennium Line, and the new Port Moody municipal town centre served by the 97B Line. The availability of a good transit alternative as well as shops and services within easy walking distance adds to the livability of these new developments.

Increase Transportation Choice

In January 2002, there were 1,214,000 licensed vehicles in the Greater Vancouver, an increase of 22,000 vehicles over the year, or a 1.9 per cent growth rate compared to an estimated 1.3 per cent growth rate in the population.

Use of the transit system on a per capita basis has remained fairly steady in recent years. Transport 2021, the region's long term transportation plan, identifies a transit target for region of 18 per cent of morning peak trips to be taken by transit by 2021. Latest figures available show that 12.5 per cent of all morning peak trips are taken by transit.

The substantial increase in residential development in the metropolitan core and in the regional town centres is helping to increase the proportion of walking trips in the region.

Addition to transit capacity figures for 2001 show a slight decrease relative to previous years. In 2002, the Millennium line opened and in its first month of operation, it was averaging about 40,000 passengers per day. An express bus service, the 97B Line, was introduced in 2002 connecting Lougheed SkyTrain Station with Port Moody and Coquitlam Town Centre.

GVRD Receives International Award for LRSP

In 2002, the GVRD was awarded the prestigious Dubai International Award for "Best Practices to Improve the Living Environment" for the Livable Region Strategic Plan. The Dubai International Award is sponsored by the United Nations Human Settlements Program and the Dubai Municipality. It recognizes outstanding best practices internationally which have a demonstrable impact on improving quality of life, involving effective partnerships and advancing sustainability.

Key LRSP Monitoring Program Indicators

PROTECT THE GREEN ZONE

- ↑ **Area of the Green Zone**
- ↓ **Area of Agricultural Land Reserve.**

BUILD COMPLETE COMMUNITIES

- ↑ **Number and proportion of total and new dwellings in municipal and regional town centres**
- ↓ **Proportion of office floorspace in municipal and regional town centres**

ACHIEVE A COMPACT METROPOLITAN REGION

- ↑ **Population growth share of annual population growth, for the Growth Concentration Area and the Vancouver Region**

INCREASE TRANSPORTATION CHOICE

- ↓ **Vehicle ownership per household**
- ↔ **Total and per capita transit ridership**
- ↓ **Growth in total and per capita transit capacity.**

↑ positive
↓ negative
↔ unchanged

1 Introduction

Vancouver Region Ranks Top of the List in World-Wide Quality of Life Surveys

Annual surveys are conducted to determine how metropolitan areas rank in terms of quality of life. The surveys are mainly used to assess "international hardship" allowances for expatriate workers. In 2002, Vancouver and Melbourne, Australia tied for top place among the 130 cities surveyed by the Economist Intelligence Unit. The rating was based on a number of factors including health and safety, culture and environment, transportation and other public services. In the William M. Mercer ranking for 2002, the Vancouver Region and Vienna tied for second place, just behind Zurich.

The Livable Region Strategic Plan is Greater Vancouver's regional growth strategy and was adopted by all member municipalities in 1996. It provides a framework for making regional growth management and transportation decisions in partnership with the GVRD's member municipalities, the provincial government, the federal government, the voluntary sector, and the private sector.

The overall aim of the Livable Region Strategic Plan (LRSP) is to help the region develop in a way that maintains and protects the environment and at the same time guide the location of urban activities to create a high quality of community life.

The *Local Government Act* requires that an annual report be prepared on the LRSP in order to evaluate progress in achieving our regional growth management objectives. Similar to the previous annual reports, this 2002 Annual Report documents progress made in achieving each of the four objectives of the LRSP.

As we look for ways to chart our progress locally, both our plans and quality of life in the region continue to measure up in the global arena. In 2002, the LRSP was awarded two international prizes and also received national recognition. In the annual William M. Mercer and Economist Intelligence Unit surveys, the Vancouver region was again at the top of the list for quality of life among world cities.

This report is organized around the four objectives of the LRSP:

Protect the Green Zone. The Green Zone protects Greater Vancouver's natural assets, including major parks, watersheds, ecologically important areas and resource lands such as farmland. The Green Zone also establishes a long-term boundary for urban growth.

Build complete communities. The plan supports the public's desire for communities with a wider range of opportunities for day-to-day life. Focused on town centres, more complete communities would result in more jobs closer to where people live and accessible by transit, shops and services near home, and a wider choice of housing types. Planning land use in a convenient way helps minimize the need for long trips and makes alternatives to car use more practical.

Achieve a compact metropolitan region. The plan avoids widely dispersed development and accommodates a significant proportion of population growth within the central part of the region. Concentrating growth allows more people to live closer to their jobs, makes better use

GVRD Regional Plans Recognized Nationally and Internationally in 2002

In November, 2002, the Greater Vancouver Regional District was awarded the prestigious 2002 Dubai International Award for "Best Practices to Improve the Living Environment" for the Livable Region Strategic Plan. The Dubai International Award (http://www.bestpractices.org) is sponsored by the United Nations Human Settlements Program (UN-Habitat) and the Dubai Municipality. It recognizes outstanding best practices internationally which have a demonstrable impact on improving quality of life, involving effective partnerships and advancing sustainability.

The Livable Region Strategic Plan was selected by an international jury from over 500 submissions as one of ten 2002 award winners to receive a $30,000 (US) prize. The Plan was recognized for the development of a shared vision among 21 member municipalities and partners guiding growth management and transportation decisions to achieve regional goals, while monitoring progress to adapt management and future planning efforts. Other award winning best practices came from Benin, Namibia, Lebanon, China, India, Brazil, Argentina, Germany and Spain. The GVRD Board dedicated the award funds to the Sustainable Initiatives Fund to provide member municipalities with the opportunity to invest in sustainability projects with region-wide benefits and to share the risks and potential advantages of innovation.

The LRSP was also recognized as an Ambassador Project in the 2002 Stockholm Partnerships for Urban Sustainability Awards competition. The conference and competition took place in June 2002 to commemorate the 30th anniversary of the 1972 UN Conference on the Human Environment in Stockholm, which was an important catalyst in building global awareness on environmental issues.

At the 2002 National Canadian Institute of Planners conference held in Burnaby, the GVRD received the Vision in Planning Award. This award recognizes plans of a historical nature that have "achieved or exceeded their intended expectations and demonstrate how innovative ideas from years ago live on, making the transition from the past, to the present to the future." The GVRD's "Livable Region Proposals" was honoured as the 2002 recipient. The "Livable Region Proposals" document was endorsed by the GVRD Board in 1975 and laid the foundation for the Livable Region Strategic Plan.

of public transit and community services, and slows the consumption of new land.

Increase transportation choice. The plan supports the increased use of public transit, walking and cycling, and reduced dependence on the single-occupant automobile. It relies upon modest expansion in road facilities, strategically improved transit service, and the development of transportation demand management measures to support environmental, growth management and accessibility objectives.

Each of these objectives is backed up by a number of implementation policies. The LRSP is implemented primarily through the land use decisions of individual member municipalities. Each member municipality has prepared a Regional Context Statement which demonstrates how their Official Community Plan helps achieve the regional growth management objectives.

The LRSP is a vision guiding the region to 2021 and beyond. In many instances, progress is difficult to assess in the short term. The intent is to use the available information to see if we are heading in the right direction. A combination of both quantitative data and qualitative assessment through case studies and examples is used. Member municipalities and several voluntary groups have documented their achievements for this report. Data from the 2002 census has been incorporated where available. Annual and five year indicators are included in the report and are highlighted with their indicator number in the text (e.g. Indicator G5). A complete list of indicators is contained in Appendix A.

2

Partnerships to Implement the Livable Region Strategic Plan

Many of the implementation policies of the LRSP rely on successful partnerships with member municipalities, the Greater Vancouver Transportation Authority (GVTA), First Nations, senior governments, and the voluntary and private sectors. This section reviews initiatives, opportunities and challenges that influence the implementation of the LRSP.

Promoting Consistency between Local Plans and the LRSP

The *Local Government Act* provides a mechanism to promote consistency between local plans and regional growth strategies (the LRSP) through the preparation of Regional Context Statements. With the exception of Bowen Island, which is within the Islands Trust, all member municipalities have a Regional Context Statement accepted by the GVRD Board. The objectives and policies in the Regional Context Statements broadly demonstrate how local municipalities will pursue the Livable Region Strategic Plan principles through their Official Community Plans, zoning by-laws, and day-to-day decision-making.

In 2002, the GVRD Board received requests from the City of White Rock, City of North Vancouver and the City of Coquitlam for acceptance of new Regional Context Statements. These Regional Context Statements (RCS) were prepared in conjunction with revised Official Community Plans and were accepted by the Board as being consistent with the Livable Region Strategic Plan:

- The City of White Rock OCP and Regional Context Statement emphasized the need to protect the special qualities of its community and to enhance the town centre as the focus for development.
- The City of North Vancouver OCP and RCS focused on the continued development of the Lonsdale Regional Town Centre. The OCP policies and objectives support the implementation and maintenance of parks and greenways for ecological and recreational purposes as in the direction of the LRSP. Many of the policies encouraged higher densities and mixed uses which will be able to support transit and walking.
- The City of Coquitlam consolidated its four existing Official Community Plans and in March 2002 adopted its new City Wide Official Community Plan (CW OCP), which now includes citywide policies as well as the consolidated set of Area Plans. The RCS within the CW OCP reiterates the support for LRSP policies with respect to encouragement of mixed uses, accommodation of housing

diversity in residential areas, continued growth and enhancement in the Town Centre, increased local employment opportunities, and continued accommodation of alternate transportation modes. Because planning for Northeast Coquitlam had advanced considerably since the Northeast OCP had been adopted, the CW OCP includes mapping of revised boundaries for the Green Zone in the Northeast, although the amount of land within the Green Zone has not been reduced.

In 2002, the GVRD Board also received a request from the City of Richmond to accept an amendment to its Regional Context Statement to accommodate a proposed residential development in East Richmond. The Richmond Official Community Plan and RCS had identified the established neighbourhoods in West Richmond as the suitable location to accommodate future residential growth, while East Richmond had been designated largely for agricultural and industrial development. The GVRD Board did not accept this amendment as it was considered to be inconsistent with Livable Region Strategic Plan objectives.

The *Local Government Act* also contains a provision to ensure consistency of works and services provided by a regional board with their regional growth strategy:

> *Section 865(2) ...all works and services provided by a greater board or an improvement district board after the adoption of a regional growth strategy applicable to its jurisdictions, must be consistent with the regional growth strategy.*

In 2002, a sewerage area extension request was made to the Greater Vancouver Sewerage and Drainage District by Delta Council to provide regional sewerage services to a small residential subdivision outside the urban area of Ladner in Delta. The GVS&DD made a decision to reject an extension to the sewerage area on the grounds that providing the extension would be inconsistent with the objectives of the LRSP and therefore would not meet the Board's obligations under the *Local Government Act*.

Growth Management and Transportation

The Greater Vancouver Transportation Authority is responsible for the delivery of regional transportation services consistent with the LRSP. Transit services are planned, funded, and marketed by the GVTA. Transit services are delivered through subsidiaries and private companies, such as Coast Mountain Bus Company, under operating agreements.

The GVTA provides funding for the maintenance and expansion of the regional road system. It also provides some funding for cycling facilities, transportation demand management programs, as well as Air Care. In September 2002, a second SkyTrain line opened, called the Millennium Line, and it serves the central corridor in East Vancouver and Burnaby, through to New Westminster.

Plan Reviews

A review of the LRSP is currently underway in the framework of the Sustainable Region Initiative. The information provided in this report will be one source of background material for the review. The GVTA is also preparing a new Long Term Transportation Plan for the region.

Provincial and Federal Government Role in LRSP Implementation

LRSP implementation is also assisted through working with provincial and federal governments.

On November 1, 2002, the *Agricultural Land Commission Act* was brought into force. The Act provides the legislative framework for protecting the region's Agricultural Land Reserve (ALR), an integral part of the Green Zone. This new act repeals the *Agricultural Land Reserve Act*, the *Land Reserve Commission Act* and the *Soil Conservation Act*, and replaces them with a new Act that incorporates some of the provisions from the repealed Acts, and establishes the Provincial Agricultural Land Commission (ALC).

The new Act reinforces the provincial commitment to the preservation of agricultural land

and the encouragement of farming through the management of the ALR, with one possible exception. The Act makes the commission more regionally responsive and provides opportunities for local government to become more closely involved in some aspects of ALR management. The new regional panel structure, consisting of commissioners with local knowledge, experience, and interests, may facilitate closer understanding and communication between the Commission and the Board.

The GVRD Board has expressed concern about Section 26 in the Act that other public agencies, such as the Oil and Gas Commission, may be granted powers by the ALC to make determinations on non-farm use and subdivision on ALR lands within the boundaries of member municipalities. Depending on the scope of the delegation agreement and the prescribed conditions that may be applied by the ALC, this may erode local control of land use or negatively affect agricultural interests in the ALR.

In 2002, the GVRD Board continued its dialogue with the federal government in order to raise the profile of metropolitan regions and assist with the formulation of emerging federal urban policy. The Board provided comments on the Interim report of the Prime Minister's Caucus Task Force on Urban Issues. It endorsed the directions of the report and asked for particular attention to prompt funding and implementation of the strategies and programs outlined in the report. In November 2002, the final Urban Issues Report was released and focused on the formation of Canada's Urban Strategy for urban revitalization and long term strategies for affordable housing, sustainable infrastructure, and transit/ transportation.

3 Implementing Strategic Planning Policies

3.1 PROTECT THE GREEN ZONE

The Green Zone serves two key purposes. First, it protects Greater Vancouver's natural assets, including major parks, drinking watersheds, ecologically important areas and resource lands, such as farmland. Secondly, it sets a long-term boundary for urban growth.

Our Green Zone Assets

Greater Vancouver's diverse natural resources provide ecological, social and economic benefits. They also play an important role in establishing a regional sense of place.

Over two-thirds of the region's land base, or 205,000 hectares, is within the Green Zone. Nearly half, or 91,370 hectares, are protected habitat areas (Indicator G1) and approximately 54,000 hectares are in the Agricultural Land Reserve. Rich alluvial soils of the Fraser delta make this region one of the best agricultural areas in Canada.

Agricultural Stewardship

Farmland is an important part of the Greater Vancouver landscape. It is a significant contributor to the regional economy, provides the region with a supply of high-quality, local foods, and it provides considerable greenspace for the benefit of humans and wildlife.

Since 1973, agricultural land in BC has been protected by the *Agricultural Land Reserve Act*. The administration of this act is the responsibility of the Agricultural Land Commission (ALC). However, the primary "gatekeepers" of the Agricultural Land Reserve (ALR) are individual municipalities. Applications to remove land from the ALR to subdivide or carry out a non-farm use are first received by municipalities. Most applications are turned down because they do not conform to Official Community Plan and ALR policies.

Within the Vancouver region in 2001, there were 53,700 hectares in the ALR. The Agricultural Land Commission tracks annual applications to convert agricultural land to

Richmond Agricultural Viability Strategy

The City of Richmond, in partnership with the Richmond Farmers Institute, the Ministry of Agriculture, Food and Fisheries, and the Agricultural Land Commission, is completing an Agricultural Viability Strategy to guide the long-term management of its agricultural lands. The Strategy is a framework to address local issues that affect agriculture and its economic viability.

The Strategy is consistent with the LRSP objective of protecting the Green Zone as it emphasizes preservation of the agricultural land base and enhancing viability. The policies focus on initiatives that may be implemented at the local government level to help farmers achieve agricultural viability. The Strategy also reinforces the element of sustainability for farming.

non-agricultural uses. In 2002, the Commission approved applications to permit 90 hectares of agricultural land for exclusion from the ALR (preliminary figures)(Indicator G2).

There are considerable concerns around current challenges faced by the agricultural industry and by soil-based farming in particular. The GVRD Agricultural Advisory Committee (AAC) is currently exploring how to support and enhance the economic viability of farming and food processing in the region.

The AAC established a project partnership to develop an economic strategy and partners include the Fraser Valley Regional District, the Ministry of Agriculture, Food and Fisheries, and the Provincial Agricultural Land Commission. These agencies provided both staff resources and seed funding to secure a major project grant from the Investment Agriculture Foundation of British Columbia.

The BC Agricultural Land Commission Act recognizes agricultural land as a "scarce and important resource." It is estimated that less than 5 per cent of BC's land is arable. Four municipalities – the Township of Langley, Delta, Surrey and Richmond – contain approximately 94 per cent of the GVRD's Agricultural Land Reserve.

The aim of the strategy is to ensure an economically viable industry that is organized, proactive, and sustainable over the long term.

The strategy was produced through a consultative process with industry and government stakeholders. The strategy includes six main themes:

- protect the agricultural resource base;
- streamline the regulatory process;
- ensure the availability of labour at the producer level;
- develop supportive policies and plans;
- support an expanded industry image/communications initiative; and
- become market-oriented and proactive.

Within these theme areas are over 80 specific action plan elements, each with associated objectives, resource implications, potential timing, and primary and secondary responsibilities by agency or industry group. The strategy and supporting documents are available at http://www.gvrd.bc.ca/agriculture/index.html.

There is growing interest in food issues and local agriculture in the Greater Vancouver region. Public demand for farmer-direct produce within urban areas has grown, marked by an increasing number of farmers' markets throughout the region. Connections between local chefs and farmers are also strengthening, as appreciation for fresh, local ingredients flourishes.

Hothouse operations are a profitable, high-intensity means of producing a stable, year-round supply of certain foods and an important part of the region's agricultural economy. The climatic conditions in the region are particularly favourable for hothouse production. However, the rapid rate of growth in the hothouse

industry over the past decade has resulted in some concern. Concerns are that hothouses are energy-intensive operations that are not reliant on the conditions of prime agricultural soils within the ALR for production. Hothouse developers may remove topsoil from the land on which they are built. Conservationists are concerned that hothouse operations may compromise important habitat for wildlife. Hothouses occupy approximately 200 hectares of agricultural land in the Vancouver region.

Environmental Stewardship

The LRSP contains a policy for the Green Zone to seek through partnerships the viability of the region's ecology through such measures as an interconnected system of wetlands, upland habitats, and wildlife corridors. Many organizations, both government and non-government are involved in maintaining the ecological integrity of the region. This work takes place both within and beyond the boundaries of the Green Zone, and much progress has been made. However, management of the Green Zone is variable across the region. Areas for improvement include maintaining (or creating) connections among areas of the Green Zone and to other greenspaces in urban areas, developing a better understanding of the biodiversity within the region and developing coordinated conservation strategies.

A sample of environmental stewardship programs currently taking place within the region is listed below.

- Local Government Planning
- Integrated Stormwater Management Planning
- Watershed-based Community Planning
- GVRD Watershed Management Plan
- Lower Seymour Conservation Management Plan
- GVRD Regional Park System
- Biodiversity Conservation Strategy for the Greater Vancouver Region
- Burrard Inlet Environmental Action Program/ Fraser River Estuary Management Program
- Community-based Environmental Stewardship

The organic agriculture sector is well established and expanding throughout the province. In 2001, it was estimated that BC organic production exceeded $12.5 million in sales from some 500 certified organic growers. However, consumer demand for organic foods in BC currently outruns supply

Classrooms are not the only place for learning. The Greater Vancouver region's outdoor spaces provide opportunities to discover the diversity and inter-relationships our local ecosystems and the importance of stewardship.

Farming and Habitat Conservation

The GVRD's rich agricultural lands are also important habitat areas for fish and wildlife, and offer corridors for species to move between natural areas. The Fraser delta is a globally significant stopover for birds migrating on the Pacific Flyway. However, growers can be considerably impacted by waterfowl grazing. There are a small number of organizations that work with farmers to develop and implement sound stewardship projects that benefit agricultural operations while maintaining wildlife habitat. The Canadian Wildlife Service, Ducks Unlimited, Langley Environmental Partners' Society and Delta Farmland and Wildlife Trust are some of the organizations that provide technical or financial assistance to farmers within the Greater Vancouver region.

The Greenfields Project is a community farmland stewardship program that offers incentives to local farmers for the planting of winter cover crops that protect and conserve soil, enhance land productivity, and maintain critical habitat for over-wintering and migrating waterfowl. The project is administered by the Delta Farmland & Wildlife Trust, a charitable non-profit organization.

While agriculture and wildlife have historically coexisted in Delta, issues have arisen more recently concerning increasing urbanization, current agricultural uses, and over-wintering waterfowl. To address these problems in a proactive manner, the Greenfields Project was established in 1990 as a cost-sharing cover crop program for Delta farmers to address the issues of soil conservation, crop damage, land productivity and wildlife habitat.

Local governments generally have primary control over land use issues and are key players in environmental protection. A number of municipalities have mapped and classified their streams and support on-going stream stewardship programs. Several have adopted stream and riparian protection measures. Others have adopted naturescaping principles, tree planting programs, and limitation of the use of chemical fertilizers and pesticides on city property. Their influence also extends to private property. For example, municipal development review processes commonly include tree protection/replacement programs, integrated stormwater management, habitat conservation, stream protection guidelines and stream daylighting. All of these efforts serve to maintain the region's ecological viability and protect the Green Zone.

Through the GVRD's Liquid Waste Management Plan, member municipalities have committed to undertake integrated stormwater management planning on a watershed scale for every urban watershed in the region. The objective of **integrated stormwater management planning (ISMP)** is to manage water and land resources within a watershed to prevent (or mitigate) flood and drainage problems, to preserve natural functions of the watershed, and to protect stormwater quality. This commitment will require integration of science and engineering with land-use planning and community values. To date, integrated stormwater management planning and discussions have typically involved municipal and GVRD planning and engineering staff, as well as representatives from Fisheries and Oceans Canada, the Ministry of Water, Land and Air Protection, and community stewardship groups. With significant consultation, an ISMP Terms of Reference Template was developed to give municipalities a flexible guide to the integrated stormwater management.

A watershed-based approach to community planning in the GVRD was explored over the past year by a group of biologists, engineers and planners from member municipalities, the regional district, and provincial and federal agencies. The group is working to develop a watershed-based planning tool that has the capacity to integrate community issues, policy

Integrated Stormwater Management Planning

The Stanley Park Stormwater Treatment Wetland is an example of site level stormwater management. The wetland was constructed as part of the Lions Gate Bridge rehabilitation project. In negotiations with the Provincial Government, the Vancouver Board of Parks and Recreation requested an improved drainage system for the Stanley Park Causeway in order to contain and treat stormwater runoff. With the new drainage system, storm sewers convey runoff to the constructed wetland at Lost Lagoon that serves as a settling pond and natural filtration system. The wetland contains a sedimentation forebay, marsh terraces, and deep pools with plantings of native riparian and wetland vegetation. Benefits of this naturalized stormwater treatment project include water conservation and water quality improvements, additional wildlife habitat, and nature viewing and educational opportunities.

context, hydrological, ecological and geo-technical conditions in local area planning. Discussions among this group are closely related to work on integrated stormwater management planning. As a result there has been some interchange with the inter-agency ISMP task group. Presently, the two groups are exploring possible collaborative opportunities to advance integrated watershed-based planning.

The GVRD Watershed Management Plan was approved in May 2002, and implementation programs are described further in the Five-Year Implementation Plan. The three GVRD drinking watersheds - Capilano, Seymour and Coquitlam are included in the Green Zone because of their importance to community and ecological health. They provide a protected source of water for the region and are part of an integrated system of parks and wilderness areas. The overall goal of the Watershed Management Plan is to maintain "watersheds that provide clean, safe water and are managed and protected as natural assets of the highest importance to the Greater Vancouver region." In so doing, watershed management strategies will reflect and advance the region's commitment to environmental stewardship and protection of biological diversity.

The GVRD has also approved a long-term plan for the **Lower Seymour Conservation Reserve** (LSCR). This 5,668 hectare site below

The North Shore ecological land area contains forested areas and watersheds from Howe Sound 50 km eastwards to the slopes above Pitt Lake. It is an extensive wilderness area characterized by significant elevation change and high ecological diversity.

Boundary Bay Regional Park offers multiple recreational and wildlife viewing opportunities. It is also habitat for more than 250,000 migratory birds each year. The bay is one of the most important stops on the Pacific Flyway.

the Seymour watershed contains water utility infrastructure that supplies water to 40 per cent of the GVRD. The LSCR is an ecologically important area within the GVRD Green Zone. It serves as an outdoor "classroom" for research projects pertaining to ecology, resource management, and cultural heritage, which are demonstrated to the public through an extensive education program. In addition the LSCR is also a highly popular recreation site, offering a diversity of activities such as hiking, cycling, kayaking, fishing, in-line skating, interpretive programs, and other activities.

Recognizing the multiple interests and activities in the LSCR, the GVRD Board initiated the development of the **LSCR Management Plan**. The Management Plan was developed through extensive consultation, including a series of forums, workshops and technical studies, and will guide future management of the area. The plan was approved by the GVRD Board in 2002 and includes strategies to advance the Board's goals for the area of:

- maintaining the LSCR's capacity as a water reserve and providing for water utilities;
- continuing forestry research and administrative activities;
- increasing recreation and interpretive potential; and
- creating a new land stewardship approach that builds on a high level of participation.

The **GVRD Regional Park System** includes 24 regional park sites and one regional greenway covering 11,714 hectares.

Acquisitions in 2002 included the expansion of Surrey Bend's Robert Point, which will provide a greenway connection to the Barnston Island Ferry. In addition, several parcels in Kanaka Creek were purchased to improve connections and boundary continuities. Thwaytes Landing was acquired in partnership with the District of North Vancouver and the Land Conservancy of BC. This 52 hectare waterfront property will provide a rest stop for boaters on Indian Arm and protect over one kilometre of spectacular shoreline.

Under the Georgia Basin Ecosystem Initiative, partners are developing a pilot strategy for conserving biodiversity. The strategy will guide management of the Green Zone and be a key component in the review of the Livable Region Strategic Plan. The aim of **Biodiversity Conservation Strategy for the Greater Vancouver Region** is to assess and communicate the status of biological diversity in the region, develop coordinated management strategies to conserve and enhance that biodiversity, and evaluate the benefits. The project working group involves staff from Environment Canada, the BC Ministry of Water, Land and Air Protection, the Ministry of Sustainable Resource Management, Burrard Inlet Environmental Action Program/Fraser River Estuary Management Program and the GVRD, as well as representatives from member municipalities and stewardship organizations.

In 2002, the **Burrard Inlet Environmental Action Program**'s Consolidated Environmental Management Plan was approved by BIEAP partners, including the GVRD. The plan provides a comprehensive environmental policy framework for coordinating programs and activities affecting Burrard Inlet. The four goals of the plan are to: improve water quality, reduce the effects of historically contaminated lands and sediments, enhance habitat and preserve biodiversity, and encourage human and economic development activities that protect and enhance the environmental quality of the Burrard Inlet ecosystem.

Langley Environmental Partners' Society

The Langley Environmental Partners' Society (LEPS) is a non-profit, watershed-focused organization that aims to protect and rehabilitate the natural environment through education, cooperation and action. LEPS occupies a unique position in the community. Working in close partnership with the Township of Langley, LEPS is developing a wildlife conservation strategy for the municipality. The project goals are to:

- maintain a healthy diversity of native species and habitats;
- achieve habitat protection goals through combination of municipal planning and community stewardship efforts; and
- create a "climate of certainty" for landowners, developers, local and senior government, conservation groups and the community.

The **Fraser River Estuary Management Program** (FREMP) is currently updating the Estuary Management Plan and associated action programs. Consultation with community members, FREMP partners, First Nations and other stakeholders (e.g., NGOs, industry) is currently ongoing. A revised Estuary Management Plan will be completed in 2003 for approval by the FREMP partners.

Increasingly within the GVRD, **community-based organizations** are taking a leading role in environmental stewardship, and have gained influence in government decision-making. These groups have both raised the profile of environmental issues and advanced the practice of land stewardship through such work as stream rehabilitation, mapping and monitoring. Many of these groups have developed community and land-owner training programs that have been instrumental in expanding environmental expertise within local communities.

Regional Greenways Program

Greenways are linear open spaces established along natural corridors, utility corridors, or transportation right-of-ways. They serve at least three major functions: they can conserve green space; they can provide walking and cycling paths; and they can maintain ecological and recreational connectivity between conservation lands, communities, parks, cultural sites and other recreational facilities. These connections enhance quality of life and are vital to native ecosystems and landscapes. The multiple objectives served by the corridors are a good illustration of the concept of sustainability- meeting social, economic, and environmental objectives at the same time.

The GVRD Board adopted the Greenway Vision in 1999, following consultation and support by member municipalities. The vision endorses a regional network of ecological and recreational corridors to connect areas of the Green Zone.

Five detailed greenways sector plans have been completed, including the Fraser Valley,

The LSCR Management Plan sets out a zoning framework for the LSCR that recognizes the physical and biological sensitivities in different areas, as well as existing facilities, to guide land management.

Green Links

In 1996, the Institute for Urban Ecology at Douglas College initiated its Green Links Project. The primary objective of the project is "to increase the ecological value and biodiversity of green spaces in the Lower Mainland." Green Links works to establish a network of ecological corridors that connect and enhance isolated areas of habitat.

The primary enhancement activity involves (re)establishing native plant communities in disturbed habitats along the corridors in order to support resident species of wildlife. Other project elements include, native plant salvages from sites that are to undergo development, biophysical surveys of Green Links sites, community surveys, and urban ecology and restoration symposia. Currently, Green Links is working on enhancing four linkages. Two are located along BC Gas/

BC Hydro utility corridors in Coquitlam and Surrey-Delta. The third is located along an existing urban trail system in Burnaby, and the fourth involves habitat enhancements in residential backyards and balconies.

Burrard Peninsula-Richmond, North Shore, Pitt Meadows and Maple Ridge, and the Northeast Sector. The final sector plan for Delta, White Rock and Surrey will be completed in 2003. While the system of recreational greenways is well advanced, the ecological component of the Greenway Vision has progressed at a slower pace.

In partnership with other agencies, the GVRD is currently pursuing two greenway pilot projects that parallel utility corridors. Construction of these greenways is being coordinated with upgrades to sewer maintenance access roads. The Brunette Fraser Greenway provides a connection between Burnaby Mountain Conservation Area Park and Westminster Quay. Sapperton Landing, a major staging area for the Brunette Fraser Greenway, was officially opened in 2001. Many sections of the 16 kilometre route are already complete. The Delta-South Surrey Greenway was approved November 2002. It will link the Fraser River to Boundary Bay providing an off-road route for pedestrians and cyclists to connect New Westminster and North Surrey to the Tsawwassen Ferry Terminal. In cooperation with the City of Surrey, a portion of the greenway was acquired through Mud Bay Park to extend the Boundary Bay Dyke Trail a further 3.5 kilometres.

The Evergreen Foundation is a non-profit organization with a mandate to bring nature into the city through naturalization projects, creating healthy outdoor spaces in partnership with schools, community members and home owners. Photo credit: Evergreen Foundation

The Central Valley Greenway is a 22.5 kilometre regional greenway project supported by the environmental advocacy group B.E.S.T. (Better Environmentally Sound Transportation) and recipient of the 2001 $1-million VanCity Award. The Greenway will stretch from False Creek near Science World to the Fraser River at the mouth of the Brunette River.

The Central Valley route was identified in the official greenway plans of Vancouver, Burnaby, New Westminster and the GVRD. Approximately 20 per cent of the trail network is existing, and 50 per cent is planned or actively under construction. The balance remains at the conceptual stage.

3.2 BUILD COMPLETE COMMUNITIES

The Livable Region Strategic Plan supports the public's desire for communities with a wider range of opportunities for day-to-day life. Focused on town centres, more complete communities will result in jobs closer to where people live, shops and services near home, and a wider choice of housing types.

Housing Choice and Complete Communities

The LRSP contains a policy stating that the GVRD will seek through partnerships "a diversity of housing types, tenures and costs in each part of the region." Significant gains have been made in recent years on the choice in housing stock. In the last five years about 68 per cent of all new housing built in the region has been multi-unit dwellings (townhouse, duplex, and apartment buildings).

In the year 2001, about 8,000 new dwellings were built in Greater Vancouver and 59 per cent were multi-unit dwellings. More than one-third of dwellings were apartments (37 per cent), 41 per cent were single detached homes, and 22 per cent were semi-detached or row houses. In 2000, the level of building activity was slightly higher as was the proportion of multi-unit dwellings. Building activity in 2002 will show a significant increase over 2000 and 2001. (Indicator B1)

The combination of lower interest rates and weak equity markets has created temporary increased activity in the purpose-built rental housing market. In 2001, the proportion of private rental dwellings built was 10 per cent of all dwellings, compared to only four per cent in 1999. However, the majority of new market rental units in the region continue to occur in own-to-rent condominiums, and in small-scale developments such as duplexes and secondary suites.

The LRSP encourages the production of ground-oriented, medium density housing and municipalities in the region, through the Regional Context Statements in their Official Community Plans, identify the means by which they are providing for this type of housing. The design and development industry, including non-profit developers, continue to innovate to provide quality, well-designed units ranging from two-family dwellings and townhouses where units all access the street or a courtyard/podium, to row housing built at the base of point towers. In 1996 and in 2000, the GVRD's Housing Task Group produced a "best practices guide" to showcase these quality projects and initiatives across the region. It is currently updating this guide for 2003.

Freehold Tenure Row housing

A 1996 GVRD study of housing consumer preferences confirmed a strong preference for freehold tenure housing, and further revealed that freedom from intrusion from neighbours ranked as the most important single factor driving choice of residence.

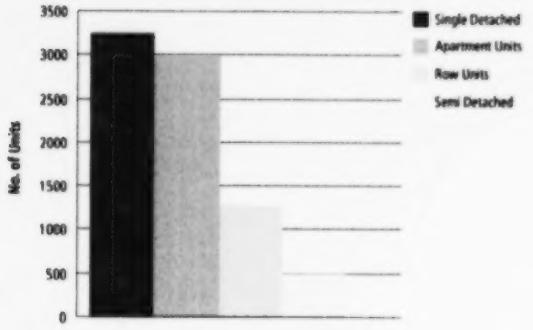
Freehold tenure row housing represents a type and tenure of housing that would appear to meet both the policy objectives of the provision of more ground-oriented medium density housing, and also a housing consumer preference for ownership of one's unit over membership in a strata council. The experience with this type and tenure of housing in the region is varied. The City of Burnaby zoning bylaw has made provision for this type of housing since 1967, the City of Vancouver is currently working on a demonstration project; and the City of New Westminster has recently developed a bylaw to specifically accommodate this type of housing.

Secondary Suites

The GVRD completed a regional study on secondary suites and published its "Review of Municipal Secondary Suite Policies in the Greater Vancouver Regional District" in March 2002. An inventory of the number of secondary suites in the region was completed in November 2000, and even while recognizing an undercount due to imprecise data, the inventory provided an estimate of between 54,000 and 69,000 suites in the Greater Vancouver region. These suites therefore represented between 19 per cent and 25 per cent of the region's renter households at that time, and the numbers confirm the significance of secondary suites as a component

Housing Completions by Type, GVRD, 2001

Source: Canada Mortgage and Housing Corporation



of the region's affordable rental housing stock.

Two clear policy trends have emerged among the region's municipalities over the past decade: 1) that there is a movement from leniency of enforcement to legalization of suites and 2) that there is a trend to move from neighbourhood-to-neighbourhood policy to general municipal-wide policy. These trends imply that public and political support for either legalization or for authorization of suites with conditions is increasing. Those municipalities which have adopted bylaws to permit suites reported no increase in complaints or in staff resources required to address suite-related issues. Municipalities moving towards legalization or authorization of suites are also pursuing cost recovery associated with the demand for additional utilities and community services.

A number of municipalities and the GVRD Housing Task Group have raised concerns regarding GVRD development cost charges and their effect as a disincentive to smaller, affordable housing units, including secondary suites. This issue is expected to be examined as part of the Sustainable Region Initiative.

Demand for Affordable Housing Study

The GVRD and the Greater Vancouver Housing Corporation (GVHC) are completing a joint study on the demand for affordable housing, which is intended to provide a quantified forecast to 2021 of the demand for both market and non-market housing units, and to identify the region-specific barriers to meeting this demand. Although the study is designed to examine separately the components of the housing market (both market and non-market housing, and owned and rental tenures), affordable housing is treated as a continuum along which residents move in different directions during different times of their household life cycle.

Regional Work on Homelessness

Regional work on homelessness has been guided by the work of the Regional Steering Committee on Homelessness, a broad-based committee of service-providers, governments and shelter operators in the region. The 2001 regional strategy to address and prevent homelessness provided over 60 policies with corresponding action steps that are intended to address homelessness through the provision of a continuum of housing and support services.

In 2002, regional work on homelessness included completion of a region-wide study on homelessness which provided the first regional estimate of both homeless and at-risk persons in Greater Vancouver, and also provided a profile of these two populations. Within one 24 hour period in January 2002, over 1,200 homeless persons were counted in a regional survey. The study also estimated that 58,000 households in the region are at risk of homelessness. Approximately $6 million was allocated in 2002 to address homelessness in Greater Vancouver, under the federal government's initiative on homelessness through its "Supporting Communities Partnership Initiative" (SCPI).

Building a Network of Centres

The LRSP identifies the building of a network of centres across the region as one of the best ways to accomplish the complete communities objective. The Metropolitan Core and Greater Vancouver's eight regional town centres are the focus for high density residential, major region-serving employment, retail, cultural and community facilities. These centres act as a hub for subregional and regional road and transit access. The LRSP also identifies a network of 13 municipal town centres which have an important role in serving several surrounding

neighbourhoods. This pattern of "concentrated dispersal" would result in a concentration of jobs, shops, and services in a network of centres throughout the region that offer good access by transit, car, walking, and cycling. All member municipalities have incorporated the centre concept into regional context statements, official community plans and zoning.

With growing congestion problems and expanding metropolitan areas, the importance of town centres has gained renewed interest throughout North America as a key method of enhancing livability and integrating land use and transportation by increasing access to jobs, services, expanding housing choices, and supporting transportation choices.

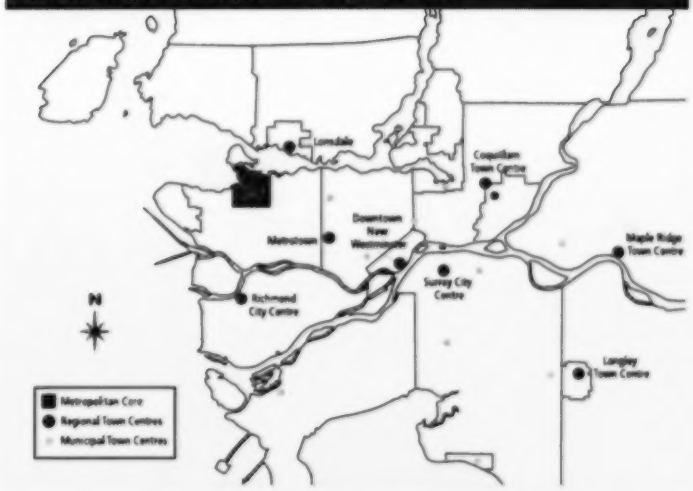
In many ways, the progress in regional town centre development in Greater Vancouver has been impressive, especially in the context of North American metropolitan regions. Many of these centres are key subregional shopping destinations, have a significant stock of housing, excellent community infrastructure, and most perform well above the regional average in terms of transit and walking for work and shopping trips.

The accompanying table shows population growth in all of the regional town centres and the Metropolitan Core from 1991 to 2001. Housing growth in and around the town centres has made an important contribution to densification of existing urban areas. An analysis of housing tenure in the regional town centres shows that these locations also provided an important supply of rental housing.

As documented in the 2001 Annual Report, the regional town centres have not been so successful in attracting office development. From 1990 to 2000, approximately 14 million square feet was added to the Vancouver region office market. The Metropolitan Core's inventory grew by over six million square feet, the eight regional town centres grew by 937,000 square feet, and the office parks grew by just under seven million square feet.

While it is expected that there will continue to be a market for office park space, LRSP objectives can best be attained by capturing a

Livable Region Strategic Plan: Major Centres



Population in Regional Town Centres

Source: Statistics Canada

	Population			Pop. Growth 1991–2001	
Regional Town Centre	**1991**	**1996**	**2001**	**Actual**	**Percent**
Coquitlam Centre	1,560	4,460	6,175	4,615	295.8%
Langley Town Centre	8,615	10,855	13,205	4,590	53.3%
Lonsdale (North Van. City)	17,990	19,925	22,540	4,550	25.3%
Maple Ridge	3,821	3,765	3,925	104	2.7%
Metrotown (Burnaby)	16,775	21,005	24,140	7,365	43.9%
New Westminster	5,2 50	6,660	6,570	1,320	25.1%
Richmond Centre	17,440	23,260	28,635	11,195	64.2%
Surrey City Centre	13,790	15,735	17,165	3,375	24.5%
Total RTCs	85,241	105,665	122,355	37,114	43.5%
Vancouver Metro Core	60,685	72,985	87,695	27,010	44.5%
Total RTCs Plus Metro Core	145,926	178,650	210,050	64,124	43.9%
Vancouver CMA	1,602,590	1,831,665	1,986,965	384,375	24.0%

Office Inventory in Regional Town Centres

Source: Royal LePage 2001

	Occupied Office Inventory (sq ft)		Net Increase
Regional Town Centre	**1990**	**2000**	**1990-2000**
Metropolitan Core	18,689,900	24,979,600	6,289,700
Metrotown	1,265,050	1,787,250	522,200
Richmond Town Centre	845,150	875,150	30,000
Lonsdale	718,350	783,350	65,000
Downtown New Westminster	497,800	537,800	40,000
Surrey City Centre	30,000	310,000	280,000
Coquitlam Centre	50,000	50,000	–
Langley Town Centre	130,000	130,000	–
Maple Ridge	NA	NA	NA

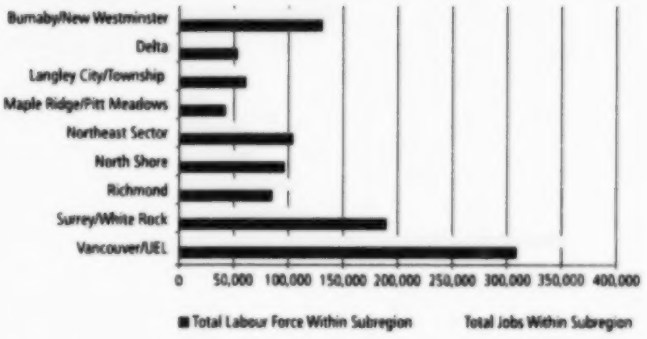
City of Vancouver Policy Helps Increase Supply of Non-Market Housing

Since 1988, the City of Vancouver has required that 20 per cent of the residential units in major projects be designated for non-market housing, with a priority for core-need households. The policy states that the non-market housing sites be made available at a price that allows the projects to be developed within the maximum budgets established by senior government non-market housing programs. At least half of the non-market housing units must be designed and developed for families. In some cases, the 20 per cent policy has been relaxed for major projects where economic feasibility or other public priorities do not permit the full 20 per cent non-market requirement to be achieved.

This building at 941 Main Street is one of three non-market housing projects in the CityGate development and has 102 units of primarily family housing. The site was provided by Bosa Development Corporation and the units were funded by BC Housing under the City/Province Non-Market Housing Partnership. With the completion of the CityGate Co-op, the non-market housing requirements for CityGate have been fulfilled. To date half of the 2500 non-market unit potential created by the City's 20 per cent policy have been developed.

Total Jobs and Labour Force by Subregion, 2001

Source: Statistics Canada



This graph shows the total number of jobs and labour force by subregion. The number of residents working in their own subregion rose marginally by 0.8 per cent between 1996 and 2001. Between 1996 and 2001, the number of jobs in the Vancouver/UEL has grown at a slower rate than labour force growth while in Burnaby/New Westminster, Richmond, Surrey and Langely City/Township there has been strong job growth during this period (see also Indicator B5 and C5).

larger proportion of office jobs in the Metropolitan Core and the town centres. The benefits of "centre living" realized by existing and future residents are enhanced through the development of a strong job base. By locating office jobs in centres, the opportunities to take transit, walk and cycle to work are increased. Centre businesses are supported, community services are accessible to all, and vibrant urban communities are achieved.

In 2002, planning staff from member municipalities formed the Livable Centres Task Group. The purpose of the task group is to share ideas among municipalities and work with the private sector and other levels of government to improve the attractiveness of the town centres as places to live, work, and shop.

MUNICIPAL TOWN CENTRES

The LRSP identifies a network of centres, including the metropolitan core, eight regional town centres, and 13 municipal town centres. While the metropolitan core and 8 regional town centres serve large subregions and are the focus for regional transportation and facilities, the municipal town centres provide an important local focus for shopping, a variety of housing types, and community facilities. Here are two examples of municipal town centres that are seeing their town centre visions rapidly being implemented through strong development interest in recent years.

Brentwood Town Centre

Although Brentwood was already an important centre for retail and high density housing prior to the construction of the new SkyTrain line (opened in 2002), development interest has increased as a result of the improved transit service. Burnaby, through its Official Community Plan, has increased housing capacity along both SkyTrain corridors in order to take advantage of regional transit infrastructure and help increase the proportion of population within the region's Growth Concentration Area. Brentwood Town Centre is expected to accommodate almost 20 per cent of the City of Burnaby's new dwellings in the next 20 years, with approximately 6,700 additional residential dwelling units. There were approximately 2,600 dwellings in the centre in 2001.

Port Moody Inlet Municipal Town Centre

In recent years Inlet Centre has seen many impressive new developments including Port Moody City Hall and Civic Complex, and Newport Village, a very successful mixed use development with a "village" feel. A new 75 unit low rise residential building will be completed in Newport Village by mid-2003 as well as a 135 unit high rise in 2004. Port Moody's largest office building with a total of 60,500 square feet was completed in 2001.

Construction is underway for a 96 unit residence with mixed housing for the Hospice Society, low-income, and women at risk. In 2002, Port Moody Council rezoned the IPSCO 11 ha. site in Inlet Centre to permit a mixed-use development that will include up to 1100 multi-family residential units in low to high-rise building forms, mixed commercial/light industrial/ residential development of up to approximately 2.2 ha of the site, and open space and greenways comprising approximately 1.0 ha.

Brentwood Town Centre

Madison Children's Centre is a City-owned child care facility provided through a density bonus from the Madison Centre development.

Port Moody Inlet Municipal Town Centre

BUILDING A NETWORK OF CENTRES

A housing development just off Columbia Street in Downtown New Westminster

Revitalizing Columbia Street Historic District, New Westminster

Committed to its revitalization efforts for the downtown core, the City of New Westminster has recently introduced zoning and financial incentives for the Columbia Street Historic District. One such incentive encourages increased residential uses along Columbia Street by restoring the same level of density for residential units in portions of heritage buildings historically used for housing. This amendment creates the potential for an additional 200 housing units along Columbia Street.

The City has also relaxed off-street parking requirements for hotels in this area. As the district is flanked by two SkyTrain stations, the demand for parking in this area is less than in other areas of the City. This reduction in required parking spaces is expected to increase the viability of hotels while reinforcing transportation objectives for the Greater Vancouver region.

The City has adopted a Financial Incentives Program for historic Columbia Street in downtown New Westminster. This program encourages redevelopment downtown while maintaining its unique historic character by providing grants to owners of heritage buildings for feasibility studies as well as façade and seismic upgrades. In 2002, funding of $485,000 in total was awarded to 15 recipients.

Simon Fraser University in Surrey

Simon Fraser University Surrey opened its doors in September 2002. The SFU satellite campus currently offers undergraduate and graduate degrees in Information Technology and Interactive Arts and is located adjacent to the Surrey Central SkyTrain station.

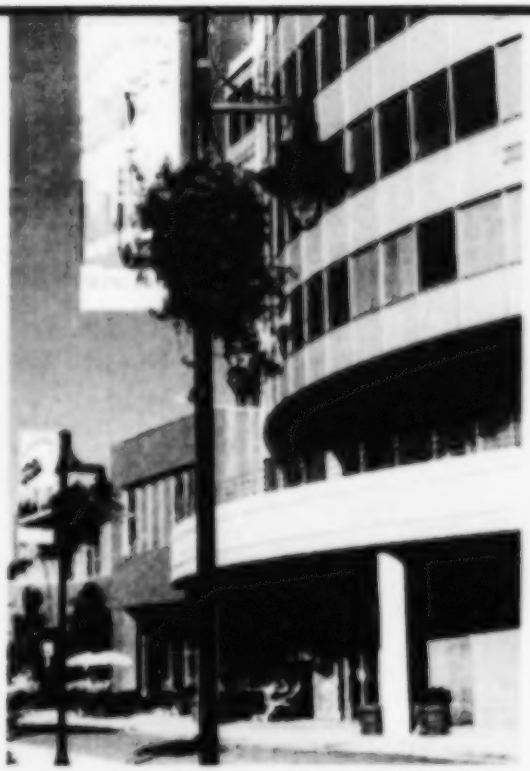
Metrotown, Burnaby

This new office building constructed by Bosa Developments has a 2-storey Staples stationery store at street level, with underground parking.

A New Civic Centre for Maple Ridge Regional Town Centre

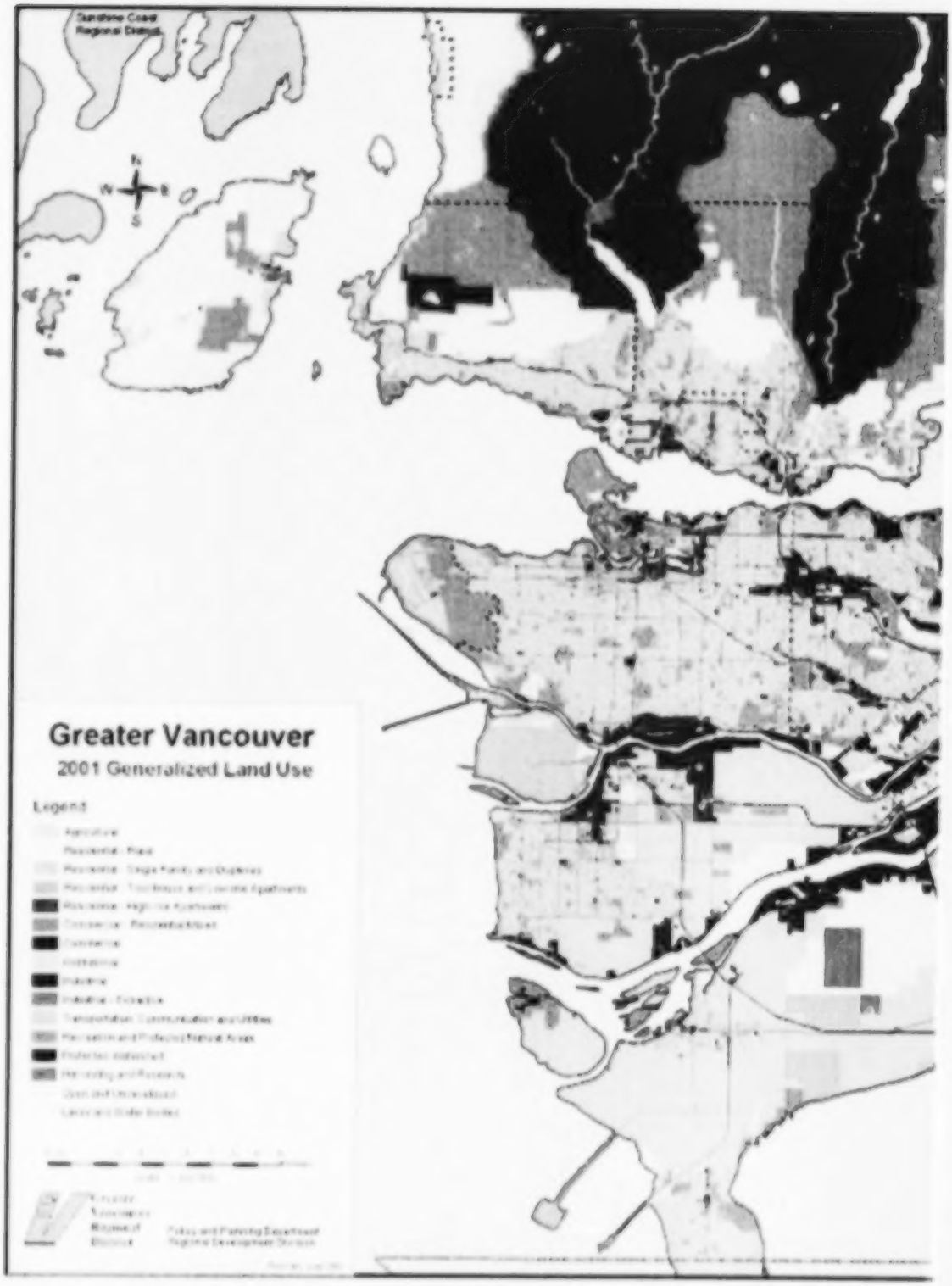
For more than a decade, studies and community forums recommended the creation of a new Town Centre for Maple Ridge which would serve as a central focus for the community. Construction began four years ago and it is now nearing completion. A pleasant pedestrian environment has been created as well a "town square". The civic centre development consists of the following features:

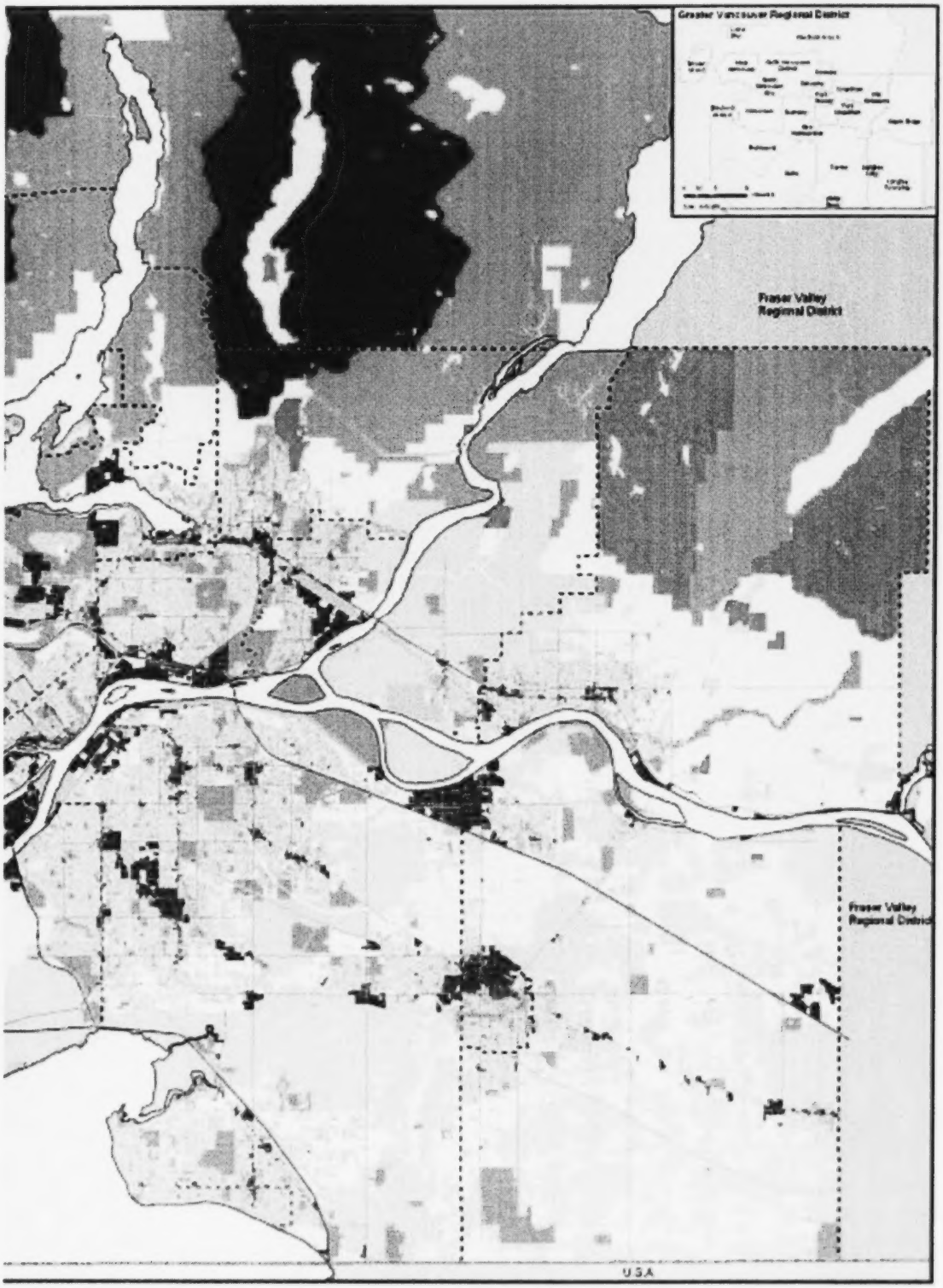
- **Memorial Park** – central public park area widely used for festivals, outdoor concerts etc. Also houses a heritage bandstand and the veterans memorial
- **Public library** – library space was increased from 15,000 sq. feet to 37,000 sq. ft.
- **Business Centre** – 90,000 sq. feet of office space is available. In addition, some civic departments are housed in this facility as well as in the original Municipal Hall.
- **Leisure Centre** – leisure and fitness space was increased from 39,000 sq. feet to 72,000 sq. feet;
- **Greg Moore Youth Centre** – operated in partnership with the Maple Ridge Youth Council;
- **Arts Centre and Theatre** – operated in partnership with the Maple Ridge-Pitt Meadows Arts Council. The facility contains a 500 seat professional theatre space, 150 seat studio theatre, workshop areas, art gallery and conference rooms;
- **Underground parking** to complement the existing on-street parking.



Maple Ridge has completely renovated the heart of their town centre. This office building houses the civic offices as well as private sector offices and fronts on a lovely town square. A community centre complete with a swimming pool and skating rink, and a theatre are also included in the new development.

A new senior's housing complex is a short walk from the town centre. Pedestrian improvements and a bike lane make cycling and walking strengthen connections to the town centre


Greater Vancouver
2001 Generalized Land Use
Legend


Greater Vancouver Regional District
Fraser Valley
Regional District
Fraser Valley
Regional District
U.S.A.

New Community on Simon Fraser University Campus

A planned community is being developed by the Simon Fraser UniverCity Community Trust (UCT) which may one day see up to 4,500 homes and 250,000 square feet of commercial and office space on Burnaby Mountain at Simon Fraser University. While addressing all of the goals of the Livable Region Strategic Plan, the proposed development is a particularly good illustration of Green Zone stewardship and compact infill development within the Growth Concentration Area. The City of Burnaby has worked with Simon Fraser UCT and its prr ect team from the development of the Official Community Plan for SFU through the design development process to ensure the ecological integrity of the Burnaby Mountain Conservation Area is protected and to guide the development of a sustainable community.

An important part of the Green Zone, Burnaby Mountain Conservation Area, located adjacent to the University, is an "ecological reservoir" of habitat and species in the region and an integral part of the region's Green Zone. One of the most significant salmon streams in the region, Stoney Creek, has its headwaters at Simon Fraser University and runs through the conservation area. Simon Fraser University transferred 312 hectares of land to the City of Burnaby to form part of the 567 hectare conservation area in exchange for development capacity within the Ring Road. The development will serve as an endowment to fund the university on an ongoing basis.

Construction of the east neighbourhood called University Highlands began in fall of 2002. The first phase building program includes approximately 475 condominiums and 80 rental apartments along with about 45,000 square feet of new retail and office space linked to a future town square that will be the cornerstone to the new community. A new elementary school is also planned within an existing university building, and a commitment has been made to include child care facilities in the new development.

Integrated stormwater management is a fundamental element shaping the development that will help protect fish and aquatic habitat downstream. The main entrance to Highlands features a large retention pond, waterfall, fountains and plantings that enhance the natural and built environment. A comprehensive watercourse protection and stormwater management program requires each development parcel include specific on-site stormwater facilities based on the impervious area coverage.

Remaining stormwater will be stored and infiltrated in communal systems that include retention, biofiltration ponds and infiltration trenches throughout the development. In addition, covenants specifying performance targets and

maintenance requirements on stormwater management areas are required and developers must attend sediment control and Green Building workshops sponsored by UCT. However, despite a rigorous sediment and stormwater control program, the challenges of implementing requirements on the ground are apparent as construction gets underway.

Roads will incorporate stormwater infiltration swales and strips of permeable paving for on-street parking. This road design has great potential for application in other parts of the region and could substantially reduce the volume of run-off within the storm system working towards greater protection of fish habitat. Facilities to encourage car-sharing co-operatives, van-pooling and cycling will be provided, and there is a frequent transit shuttle link to Production Way/University Sky-Train Station. As a result of these transportation choices, parking standards have been reduced in the order of 0.4 -0.5 stalls per unit. Tree covenant areas are intended to protect significant groups of trees and substantial naturalized plantings will create "forest fingers" providing ecological connectivity to the conservation reserve. Green roofs, naturalized landscaping and integrated pest management measures are encouraged.

A major innovation is a new zoning that will Multi-Family Flex-Units in up to half of the residences. These are multi-family residential units that may also contain legal rental accommodation. The result will be housing designs offering accommodation suitable for students, family and guests while providing a "mortgage helper."

A compilation of all these and other best management practices are outlined in the East Neighbourhood Plan Development Guidelines – an excellent resource that may have application elsewhere. (http://www.univercity.ca/development-guidelines.pdf).

Coquitlam's Small Lot Subdivision Wins Award

A new narrow lot subdivision called Autumn Woods on Coquitlam's Westwood Plateau has recently won the UDI award and a Gold Georgie for best ground-oriented single family housing. With 10.5 metre lot widths and minimum lot sizes of 375 square metres, the 38 lot subdivision located in a row along a municipal collector street, posed a problem with respect to the effect on the streetscape. Staff worked with the developer, Portrait Homes, to reduce driveway widths, increase boulevard landscaping and to establish house designs with front porches which would reduce the impact of the typical monotonous stream of garage doors along the street. Typical lot widths on the Westwood Plateau are over 14 metres on lots of 650 square metres.

Collingwood Village Wins GVRD Livable Region Strategic Plan Award for the 2002 UDI Awards of Excellence

Collingwood Village by Concert Properties was the winner of the 2002 GVRD Livable Region Strategic Plan Award, part of the Urban Development Institute's 2002 Awards of Excellence in Urban Development. The GVRD-sponsored award recognizes developments that best demonstrate on-the-ground implementation of the Livable Region Strategic Plan's goals. An outstanding example of community-based planning, area residents have seen substantial improvements in local amenities and services as a result of a cooperative planning process with the developer and the City of Vancouver.

Collingwood Village provides a "textbook example" of transit-oriented development. As a result of a rapid transit station (constructed in 1986) being located in an older industrial pocket, a major upzoning to high density housing and commercial uses occurred in 1993. A single developer, Concert Properties, assembled 11.6 ha around Joyce Station. By the end of 2002, 1,400 multi-family units including townhouses, garden, mid-and high-rise apartments have been completed. The total buildout is approximately 2,800 units and it will eventually house about 4,500 residents.

The Village's close proximity to SkyTrain and bus service provides excellent city and regional access to places of employment and major commercial centres. It is also linked to the regional greenway system providing cycling and walking connections to recreation and commuting destinations. However, the elevated guideway for SkyTrain is an urban design challenge, creating both a physical barrier and a noise source.

Buildings have generally been oriented to the adjacent street grid and reinforce the street and public open space pattern. As a result, a pleasant pedestrian environment has been created with natural connections to the surrounding neighbourhood.

The development includes a combination of market, rental and co-operative housing, with 20 per cent of housing designed for families with children. A significant commercial component, providing basic shops and services to local residents, is located along Joyce Street at the hub of Collingwood Village near the SkyTrain station. Three public parks totaling 3.0 ha, a community centre and gym, an elementary school, daycare and neighbourhood house serve the community. The total retail/office floor area is comprised of 72,000 sq.ft. An interesting innovation of the project was the endowment of a community police station. Provided by the developer and run by volunteers, this facility is a first in Vancouver and possibly in Canada.

Following the completion of the first buildings, Concert Properties observed that the parking stalls were underutilized. A survey of car ownership revealed that 24 per cent of the households living near SkyTrain stations did not own a car, 59 per cent had one car and only 15 per cent had two cars. The City then reduced its parking provisions from approximately 1.35 to 1.0 stalls per unit, resulting in an overall reduction of over 800 parking spaces for the development. With underground parking stalls costing on average about $18,000 per stall, this revision to the parking standard allowed for a savings of several million dollars in parking infrastructure.

3.3 ACHIEVE A COMPACT METROPOLITAN REGION

The LRSP seeks to avoid widely dispersed development and accommodates a significant proportion of population growth within the central part of the region. Concentrating growth allows more people to live closer to their jobs, make better use of public transit and community services, and slow the consumption of land on the urban fringe.

Population Growth in the Region

The population of the region as of the May, 2001 Canada Census was just under 2 million, at 1,986,965. (This figure is lower than the population estimate reported in the 2001 Annual Report since Statistics Canada Census figures have not yet been adjusted for the undercount).From 1996-2001, the number of residents in the region increased by 155,300, averaging less than 1.5 per cent growth per year. In the 1991-1996, growth rates averaged around 3 per cent per year. The LRSP contains a growth management target for the region of 2,676,000 by 2021. Current Provincial projections (People 26) show a similar trajectory with the population of Greater Vancouver projected to reach 2,700,000 by 2021.

Components of Population Growth

During the past 10 years (1991-2001) the Greater Vancouver region had an average annual increase of 38,400 residents. This growth is made up a number of components:

- natural increase (births minus deaths)
- net intraprovincial migration
- net interprovincial migration
- net international migration

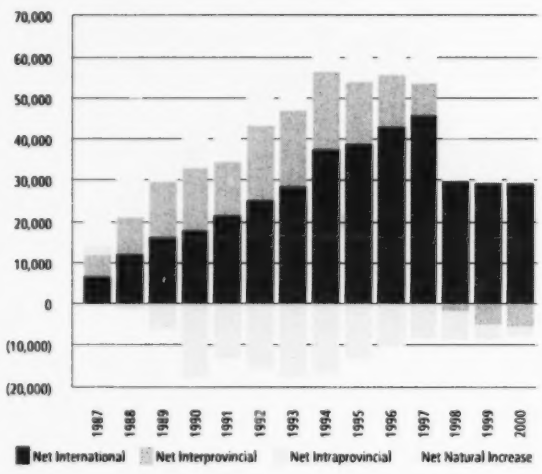
Natural Increase: Through the 1990s, the number of births in the region has remained fairly constant at around 22,000 to 23,000 births per year. The number of deaths has climbed slightly with an aging population but has ranged between 11,500 and 12,500 per year. The total population change in the region as a result of natural increase has ranged between 9,500 to 11,200 per year.

Net Intraprovincial Migration: This is the net result of people moving from other parts of British Columbia to the Vancouver region and those moving out of the Vancouver region. Greater Vancouver is consistently a net loser to the rest of BC. These numbers have been very volatile in the 1990s, ranging from a net loss of 2,310 people in 2000 to a net loss in 1990 of 17,500. Generally in the late 1990s the rate of intraprovincial migration out of Greater Vancouver has been much slower than the early 1990s.

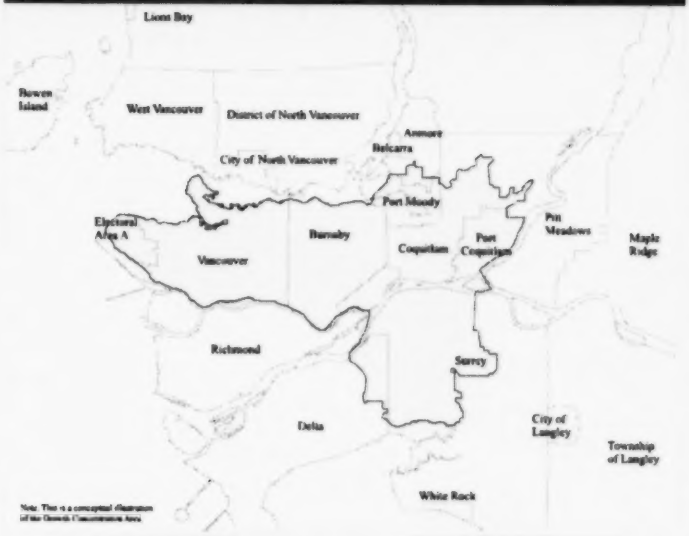
Net Interprovincial Migration: This figure is the net result of people moving into the Vancouver region from other provinces minus the people leaving the Vancouver region to live in other parts of Canada. This number has been volatile through the 1990s and depends on the relative strength of the BC economy compared to other provincial economies. In the early to mid 1990s the Vancouver region gained from 13,000 to 18,000 people from interprovincial migration but in recent years, there has been a net loss of 5,000 per year.

Components of Population Growth in the Greater Vancouver Region

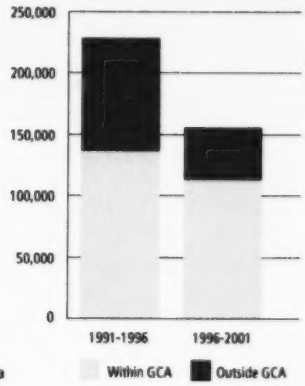
Source: Statistics Canada



Livable Region Strategic Plan: Growth Concentration Area



Additional Residents in GVRD 1991 – 2001, and Proportion in Growth Concentration Area



Source: Statistics Canada

Net International Migration: This is the number of immigrants settling in Greater Vancouver minus the number of residents who leave the region to reside in another country. From 1992 to 2000, international migration added an average of about 34,000 per year. From 1987 to 1991, international migration accounted for only 15,000 new residents per year.

LRSP Growth Concentration Area Targets

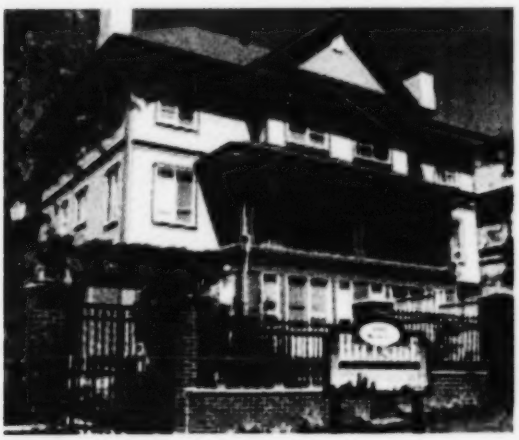
The following growth management population and employment targets for the year 2021 are contained in Table 1 of the Livable Region Strategic Plan.

2021 Targets	Population	Employment
Growth Concentration Area	1,832,000	951,000
Regional Total	2,676,000	1,317,000

The designated Growth Concentration Area (GCA) consists of the Burrard Peninsula (Vancouver, UBC and environs, Burnaby, and New Westminster), the Northeast Sector (Coquitlam, Port Coquitlam, Port Moody, and Anmore), and North Surrey/North Delta. The GCA includes the current central urbanized core of the region, plus two major subregions that are expected to make the transition from suburban to urban densities within the life of the plan. By focusing growth in the Growth Concentration Area, development pressure on the Green Zone is reduced, a better jobs/housing balance could be achieved, and the more concentrated settlement pattern helps support more transportation choice, especially transit.

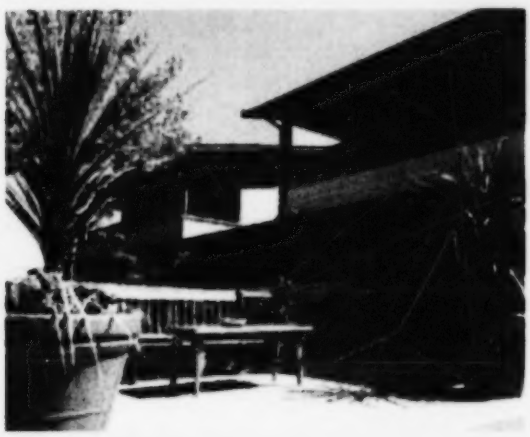
The LRSP policy target is for approximately 70 per cent of the total regional population and employment residing within the GCA in the year 2021. As of the 2001 Census, 67 per cent of the population resided within the GCA. From 1996 to 2001, the GCA population increased by 112,800 residents, accommodating 73 per cent of the region's population growth, compared to only 60 per cent during the 1991 to 1996 period. The GCA contains 46 per cent of the total urban area within the region. (In the previous annual reports, annual estimates were used to track this indicator. Since the census figures are considered to be more reliable, the annual figures have been

Hillside Place and Elizabeth Barnett Terrace in New Westminster



Hillside Place

This 29 unit, affordable housing development by Affordable Housing Societies was designed to reflect the heritage character of the neighbourhood. The three storey stacked townhomes include one, two, three and four bedroom units with underground parking. Sixty per cent of these units are priced according to the renter's income while the remaining 40 per cent are offered at market rental rates. The development incorporates attractive landscaping and a central playground that serves as a focal point for the residents.



Elizabeth Barnett Terrace

Elizabeth Barnett Terrace was constructed in 2001 and provides 23 residential units for people recovering from mental health disorders. It serves as a natural extension of the rehabilitation programs already offered by its neighbour, Pioneer House. The development is located within walking distance to the Sapperton commercial area along Columbia Street East and the Sapperton SkyTrain Station at the foot of Keary Street. Construction of Elizabeth Barnett Terrace was funded by British Columbia Housing Management Corporation.

replaced by the census figures.)

The 2001 census shows 56 per cent of the dwellings with the GCA are ground-oriented. Of the 96,000 dwelling units added from 1991 to 2001 within the GCA, approximately 58 per cent have been non-ground oriented apartments. (Ground-oriented dwellings include single detached dwellings, semi-detached, row housing, apartment/flat in detached duplex, other single attached houses, and movable dwellings.)

The OCPs and Regional Context Statements of member municipalities within the Growth Concentration Area show adequate residential and employment capacity to achieve LRSP targets. Several large residential projects within the GCA are helping to focus growth in the centre of the region. Collingwood Village in the City of Vancouver is located next to the Joyce SkyTrain station and will eventually contain 2,400 housing units on 28 acres of former industrial land.

Both Simon Fraser University and the University of British Columbia have broken ground on major residential development projects. The new community on Simon Fraser University Campus will eventually house about 10,000 people. UBC is taking advantage of infill opportunities on the existing campus and also will construct a new community on lands south of the campus. Work has begun on the two approved plans: Theological and Mid-Campus. There are four more neighbourhood plans underway North Campus, East Campus, South Campus and University Boulevard. Approximately 90 new faculty and

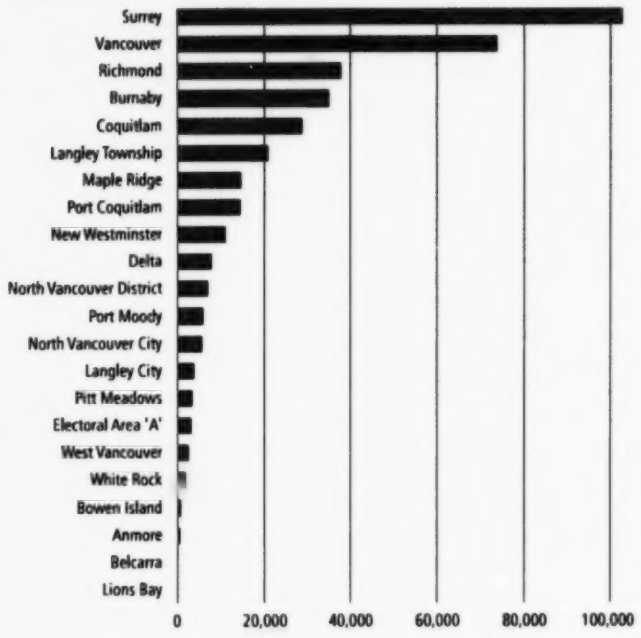
East Clayton Neighbourhood Concept Plan, City of Surrey

The need for more housing in the rapidly growing community of Surrey brought developers and landowners together with City staff, and technical experts to create the East Clayton Neighbourhood Concept Plan (NCP). Designed to demonstrate more sustainable community development standards "on the ground," the NCP demonstrates how an integrated environmental approach to development can reduce site infrastructure costs while simultaneously promoting neighbourhood vitality, preserving natural systems, and increasing transportation choices. East Clayton is a 250-hectare site situated in east Surrey. The development will be home to a population of 13,000 and 15,000 at project build-out. The East Clayton Neighbourhood Concept Plan was adopted by Surrey Council in April 2002 and construction has commenced.

The project was initiated in 1998 as a partnership between the City of Surrey Planning and Engineering Departments, UBC's James Taylor Chair in Landscape and Livable Environments, and the Pacific Resources Centre to examine options for building an urban community that follows the principles of sustainable development.

Population Growth in Municipalities, 1991 – 2001

Source: Statistics Canada



staff housing units were built in 2002, and there will be an additional 440 undergraduate student housing units ready for occupancy in September 2003.

Transport Infrastructure Required to Support a Compact Region

Achieving compact development helps support an efficient, cost-effective transportation system. The LRSP contains a policy which addresses the need for transportation services and facilities to be provided in a way that supports a compact region. This means providing infrastructure that helps support compact development and at the same time resisting investments that could encourage development beyond designated urban areas.

Achievement of Population and Employment Densities to Support Transit Investments

Transit provision and the spatial pattern of development need to work together. The LRSP contains policies to help ensure that an improved regional public transit network (which represents a very significant public investment) is provided with enough potential riders to justify the public expenditure. The significant population growth within the Growth Concentration Area from 1996 to 2001 helps support the transit system, particularly along major transit lines, in and around Downtown

Population of Greater Vancouver Municipalities, 1996 and 2001

Source: Statistics Canada

Municipality	1996	2001	Growth 1996-2001 Absolute Change	Growth 1996-2001 Percent Change
Anmore	961	1,344	383	39.9%
Belcarra	665	682	17	2.6%
Bowen Island	2,738	2,957	219	8.0%
Burnaby	179,209	193,954	14,745	8.2%
Coquitlam	101,820	112,890	11,070	10.9%
Delta	95,411	96,950	1,539	1.6%
Electoral Area 'A'	7,096	8,034	938	13.2%
Langley City	22,523	23,643	1,120	5.0%
Langley Township	80,179	86,896	6,717	8.4%
Lions Bay	1,412	1,379	(33)	-2.3%
Maple Ridge	56,173	63,169	6,996	12.5%
New Westminster	49,350	54,656	5,306	10.8%
North Vancouver City	41,475	44,303	2,828	6.8%
North Vancouver District	80,418	82,310	1,892	2.4%
Pitt Meadows	13,436	14,670	1,234	9.2%
Port Coquitlam	46,682	51,257	4,575	9.8%
Port Moody	20,847	23,816	2,969	14.2%
Richmond	148,867	164,345	15,478	10.4%
Surrey	304,477	347,825	43,348	14.2%
Vancouver	514,008	545,671	31,663	6.2%
West Vancouver	40,882	41,421	539	1.3%
White Rock	17,210	18,250	1,040	6.0%
Indian Reserves	5,826	6,543	717	12.3%
Vancouver CMA Total	1,831,665	1,986,965	155,300	8.5%

Vancouver and in the regional town centres. However, job growth in the regional town centres is lagging behind residential growth. Many office jobs are locating outside of centres in locations that are difficult and costly to serve by public transit. For the transit system to work efficiently to serve the journey to work, both the "origins" and the "destinations" must be accessible by transit.

Limit Growth across the Eastern Boundary of the GVRD

Another means of achieving a compact region is to set a goal of limiting growth in traffic volumes across the eastern boundary of the regional district. The LRSP states as a target "the achievement of travel across the GVRD eastern boundary in the peak hour and direction of not more than 5,500 mixed traffic vehicles south of the Fraser River and 2, 000 mixed traffic vehicles north of the Fraser River." These targets reflect the approximate capacities of the existing road infrastructure. This applies specifically to road traffic entering Langley Township and Maple Ridge from the east along Highways 1, 1A, and 7 in the morning peak rush hour on a typical weekday. From 1992 to 1999, volumes on Highway #1 at the eastern boundary of the region increased from 2200 vehicles to 2800 vehicles. More recent figures are not available.

3.4 INCREASE TRANSPORTATION CHOICE

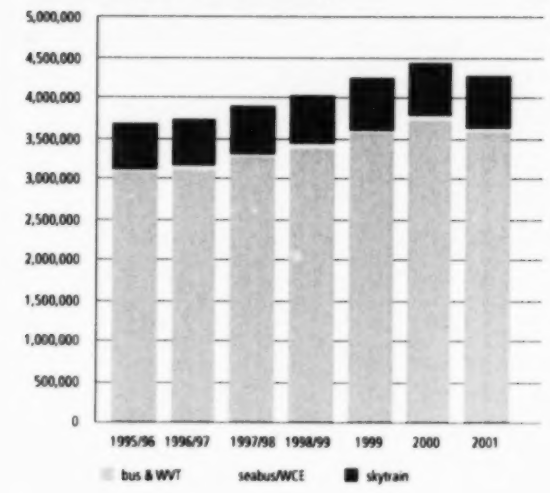
The Livable Region Strategic Plan supports the use of public transit and reduced dependence on the single occupant vehicle. It relies on an improved transit system, a modest expansion of road facilities, and the development of transportation demand management measures to support environmental and growth management objectives, and to increase accessibility for residents.

The Greater Vancouver Transportation Authority is responsible for the delivery of regional transportation services consistent with the Livable Region Strategic Plan objectives. Transit services are planned, funded, and marketed by the GVTA. Transit services are delivered through subsidiaries and private companies, such as Coast Mountain Bus Company, under operating agreements

In March 2002, the GVTA Board approved a three year Transportation and Financial Plan with an operating budget for 2002 of $600 million.

Increase in Capacity of Transit System, 1995 to 2001 (Total Annual Service Hours)

Source: Greater Vancouver Transportation Authority



Achieving Transit Ridership Targets

The LRSP seeks "to implement a transit-oriented and automobile-restrained transportation system." Transport 2021, the region's long term transportation plan, identifies a transit target for the whole region of 18 per cent by 2021 in the morning peak period. Data provided by the GVTA through trip diaries conducted in 1994 and 1999 show a slight increase in the proportion of trips made by transit in the morning peak, from 11.3 per cent of all trips to 12.5 per cent in 1999.

Transit Supply and Ridership

The Millennium SkyTrain line was opened in stages over the past year. On January 2, 2002 two stations were opened when the line was extended from Columbia to Braid Station in New Westminster. Then on August 31, 2002, nine additional stations were opened when the line was extended from Braid to Commercial Drive in Vancouver. Ridership during the month of September averaged about 40,000 per day at the 11 stations (compared to a forecast ridership of 50,000 in 2003.) The Lougheed Town Centre and Commercial Drive stations averaged over 9,000 boardings per day contributing about 50 per cent of the Millennium Line's ridership. The Expo line carries about 150,000 passengers per day. Sixty new cars have been added to the SkyTrain fleet bringing the fleet to 210 vehicles.

In addition to the Millennium Line, bus services in North Burnaby, the Northeast Sector and New Westminster were restructured to feed the new line. Changes included the introduction of the 97 B-Line connecting Lougheed Town Centre with Port Moody and Coquitlam City Centre. The 97 B-Line was carrying over 4,000 per day during September 2002. In addition, a frequent shuttle bus connection was introduced between Production Way/ University Station and Simon Fraser University. The shuttle carries about 6,000 riders per day. Increased bus service was also introduced on a number of other routes in Burnaby as well as the City of Vancouver. The 99 B-Line (Broadway corridor) ridership is estimated at 25,000

per day and the 98 B-Line (Granville corridor) around 18,000 per day.

Approximately 20 bus routes in low ridership areas will have conventional buses replaced with mini buses to provide improved service at a lower cost.

Feasibility studies are in progress for a north/south rapid transit line linking the Richmond, the airport, and Downtown Vancouver. The funding and public-private-partnership potential of the Richmond/Airport-Vancouver Rapid Transit Project are being examined.

Overall use of the transit system on a per capita basis has remained fairly steady in recent years. Data for 2001 is not comparable due to the 4-month long labour dispute. (Indicator T7)

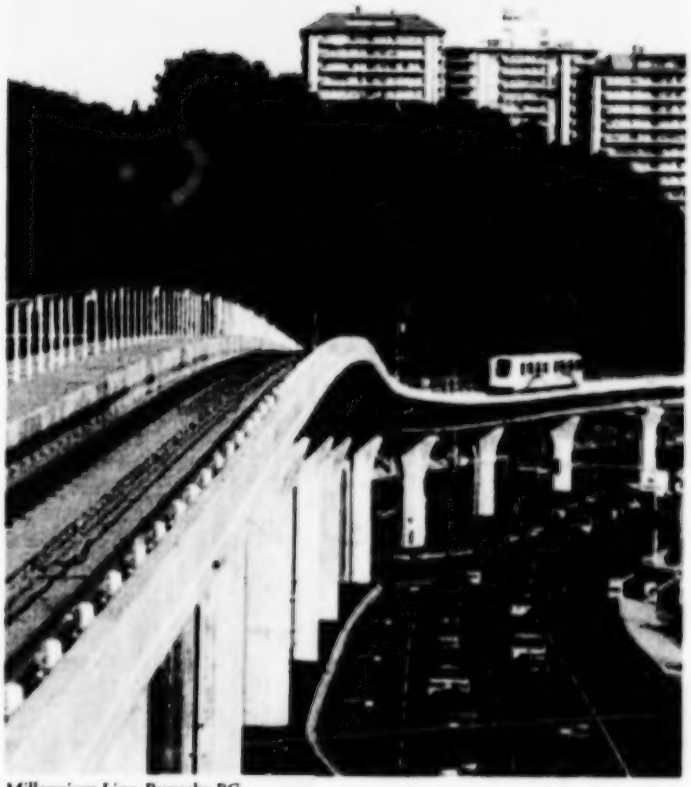
Travel Reduction Measures

Developing the fabric of the region in a way that makes public transit work, as well as trip reduction measures are needed to help boost transit use. The pattern of housing development has generally been supportive of the transit system through intensification of residential development around the Metropolitan Core, in the rapid transit corridors and around the regional town centres. However, the office employment distribution patterns have not been as supportive with a large proportion of office jobs locating outside of regional town centres.

The GVTA has identified as one of their priority transit areas, the establishment of discounted transit pass programs at post-secondary institutions to improve transit ridership in these important markets. Simon Fraser University and the University of British Columbia are expected to have programs in place by September 2003.

Regional Road Network

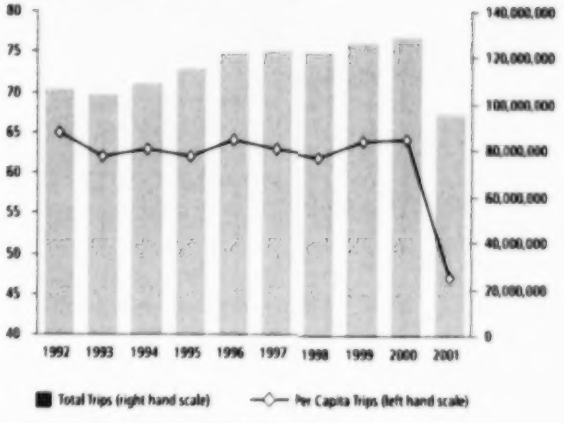
The GVTA is also responsible for regional roads. At the end of 2001, there were 2,200 kilometres of regional roads. In the 2002 capital budget, capital road expenditures were about $30 million. Under the major road network funding program, the Fraser River Crossing project has received funds to undertake detailed planning work and the estimated completion date for this project is 2006/07.



Millennium Line, Burnaby BC

Total and Per Capita Transit Trips, 1992 to 2001

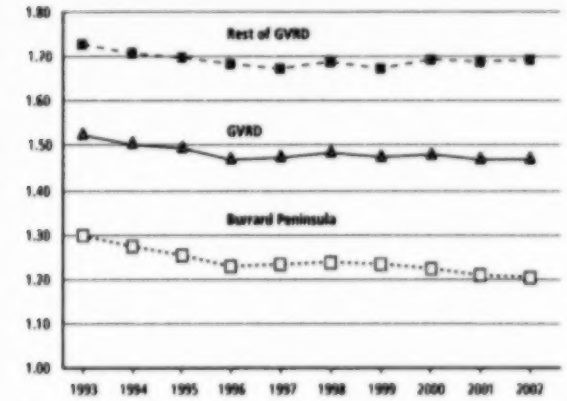
Source: Greater Vancouver Transportation Authority



Note: 2001 Low passenger trip data due to labour dispute

Vehicles per Household, GVRD, 1992–2002

Source: Insurance Corporation of British Columbia



The Central Valley cycling route is included in the official Greenway plans of Vancouver, Burnaby, New Westminster and the GVRD. Photo credit: BEST

Car Ownership Patterns

In January 2002, there were 1,214,009 licensed vehicles in the GVRD, an increase of 22,048 vehicles over the year, or 1.9 per cent annual growth rate. This was higher than population growth rate for the year which is estimated to be about 1.3 percent. The number of vehicles per capita was 0.6.

Rates of car ownership vary considerably throughout the region. The graph below shows vehicles per household for the Burrard Peninsula, the GVRD as a whole, and the rest of GVRD which excludes the Burrard Peninsula.

Cycling network

The GVTA also has a role to help encourage cycling in the region. The GVTA provides matching funds with municipalities to expand cycling facilities. The 2002 GVTA budget allocates $1.4 million for cycling facilities. Many municipalities have been making important upgrades to their cycling networks in order to increase the opportunity to cycle for recreation, commuting, to run errands, and for school trips.

Walking

Changes to the pedestrian environment to offer vibrancy, amenity, connectivity and safety in neighbourhoods, in centres and around transportation hubs can be a very low cost way to reduce driving and make transit more appealing.

Trends in the Metropolitan Core and many of the regional town centres show how important the "walk mode" is. The City of Vancouver approved a Downtown Transportation Plan in 2002 and paid particular attention to the pedestrian plan elements. They observed that while the proportion of trips by automobile have been decreasing, walking trips to Downtown Vancouver destinations (24 hour) have increased from 21 per cent in 1994 to 31 per cent in 1999. The plan provides a number of measures to improve walking conditions, such as safe, secure, clearly defined pedestrian routes, pedestrian-friendly intersections, and an improvement in the pedestrian environment through better lighting, street furniture, public art, benches, and improved landscaping.

APPENDIX A

Livable Region Strategic Plan: Monitoring Program Indicators

PROTECT THE GREEN ZONE

- G1 Area of Green Zone
- G2 Area of Agricultural Land Reserve
- G3 Total value of farm-gate sales
- n/a G4 Number of new non-farm dwelling units in the Green Zone
- ? G5 Number of endangered or threatened species (provincial red list)
- G6 Length of Regional Greenway Vision completed
- G7 Size of protected conservation areas

BUILD COMPLETE COMMUNITIES

- B1 Number and proportion of new dwellings by structure type, within and outside the GCA
- B2 Number and proportion of total and new dwellings in municipal and regional centres and corridors
- B3 Benchmark price for housing for the region
- B4 Proportion of office floor space in municipal and regional centres
- B5 Proportion of labour force working in home subregion
- B6 Proportion of rental housing in region's housing stock

ACHIEVE A COMPACT METROPOLITAN REGION

- C1 Population growth and share of annual population growth, for the GCA and GVRD
- C2 Number and proportion of ground-oriented housing inside and outside the GCA
- ? C3 Non-residential building permit values, by subregion
- C4 Number of vehicles crossing the GVRD eastern boundary, in-bound
- ? C5 Total employment and share of employment growth, for the GCA and GVRD
- C6 Growth in regional sewerage trunk lines, for the GCA and GVRD

INCREASE TRANSPORTATION CHOICE

- ? T1 Total and per capita number of vehicle kilometers driven
- T2 Vehicle ownership per household
- T3 Participation in regional ride-share program
- T4 Lane-kilometres of major road network
- n/a T5 Kilometres of streets with sidewalks and kilometres of bike lanes
- ? T6 Commuter trip length and time
- T7 Total and per capita transit ridership
- T8 Growth in total and per capita transit capacity
- T9 Mode Split
- T10 Proportion of children walking to school versus using other transportation modes

positive
negative
unchanged
? undetermined
n/a not available

Livable Region Strategic Plan Strategy: PROTECT THE GREEN ZONE

Indicator	Relevant LRSP Objectives

G1 Area of Green Zone

Relevant LRSP Objectives: Protect Green Zone areas from urban development and seek to add new areas to the Green Zone

The area of the GVRD Green Zone was calculated to total 205,520 hectares in 1998. No land was removed from the Green Zone in 2000 or in 1999. This figure requires updating, as some municipalities have added land through the development of Regional Context Statements.

Data Source: GVRD Regional Development
Indicator Update Frequency: Annual

G2 Area of Agricultural Land Reserve

Relevant LRSP Objectives: Protect Green Zone areas at risk from urban development, and minimize pressure on the Green Zone through management of urban areas

The total area within the GVRD permitted by the Agricultural Land Commission permitted to be excluded from the Agricultural Land Reserve in 2002 was 90 ha. In 2001 a net figure of 4.3 ha was permitted for exclusion. The Agricultural Land Commission estimates that the area of the GVRD ALR is approximately 53,700 ha. (Some boundary changes since 1995 are not reflected in this figure).

Year	Inclusions	Exclusions (All in hectares)
2000	0	71.5
2001	0	4.3
2002	0	90.0

Data Source: Agricultural Land Commission (provisional figures released October 2002)
Indicator Update Frequency: Annual

G3 Total value of farm-gate sales

Relevant LRSP Objectives: Enhance planning for agriculture as part of the region's economic base

Farm gate sales figures are collected as part of the 5-yearly Census of Agriculture carried out by Statistics Canada. The most recent statistics for the GVRD are therefore those published in 2001, showing $698,053,000 of sales in 2000. This grew by 40% from the 1995 figure of $498 million and represented 30% of the value of provincial agricultural output in 2001, produced on less than 2% of the province's agricultural land base.

Data Source: Statistics Canada, 2001 Census of Agriculture
Indicator Update Frequency: 5-Year

G4 Number of new non-farm dwelling units in the Green Zone

Relevant LRSP Objectives: Minimize pressure on the Green Zone and protect the Green Zone from urban development

Data options currently being evaluated.

G5 Number of endangered or threatened species (provincial 'Red List')

Relevant LRSP Objectives: Enhance the viability of the region's ecology

This indicator may need to be revised to provide a better measure of change. For example, an increase in the number of species may reflect better monitoring of habitat, rather than any change in the status of previously identified threatened species.

In the whole of British Columbia there were 223 endangered or threatened vertebrate animal species ('red and blue listed') identified in 2000. Of that total, as many as 56 are found in GVRD Parks. This provides some evidence of the importance of species habitat areas in parks.

Data Source: GVRD Parks
Indicator Update Frequency: under review

Livable Region Strategic Plan Strategy: PROTECT THE GREEN ZONE		
	Indicator	**Relevant LRSP Objectives**
G6	**Length of Regional Greenway Vision completed (recreational component)**	**Develop a region-wide trail network, and an interconnected system of wetlands and upland habitat**

The Greenway Vision, adopted by GVRD in June 1999, will see the development of recreational and ecological corridors to link areas of the Green Zone. It is estimated that 762 kilometers of recreational greenway already exist or have been identified for development in the near future. As the greenway sector plans are completed and pilot projects implemented, important connections and trail development will occur. In 2002, an additional 3.5 kilometres was added as an extension to the Boundary Bay dyke trail in partnership with the City of Surrey.

Data Source: GVRD Parks
Indicator Update Frequency: Annual

G7	**Size of protected conservation areas (including environmental greenways)**	**Protect the viability of the region's ecology**

There are no currently available accurate figures for this indicator. The Georgia Basin Ecosystem Initiative, with the participation of the GVRD, is developing a regional Biodiversity Strategy, which will identify a number of different aspects of the status of protected areas within the Region.

A 1999 study of GVRD Parks shows that 31% (over 9300 hectares) are wetlands. Since that time the GVRD has added Blaney Bog to the Park Reserve inventory which provides approximately 66 more hectares of wetland. Other wetland sites are currently being considered for acquisition through partnerships. Wetlands are thought to be one of the most important ecosystems for ensuring continued biodiversity.

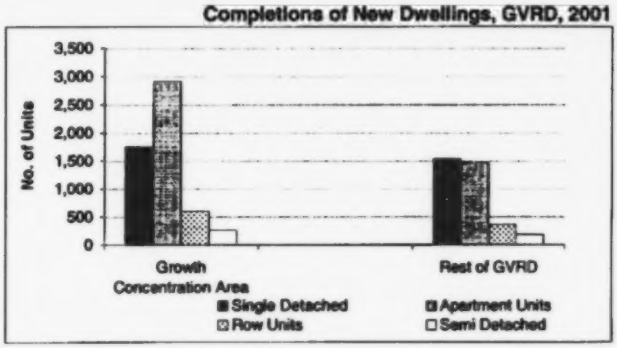
Data Source: GVRD Parks
Indicator Update Frequency: Annual

Livable Region Strategic Plan Strategy: BUILD COMPLETE COMMUNITIES

Indicator	Relevant LRSP Objectives
B1 Number and proportion of new dwellings, by structure type, within and outside the GCA	Seek a diversity of housing types across the region

During 2001 approximately 8,004 new dwellings were built within the GVRD, 63% of which were located within the Growth Concentration Area. Slightly more than 1/3 of the units (37%) were apartments, of which 67% were built in the Growth Concentration Area. 41% of the new dwelling units were single detached homes, 6% were semi detached, and 16% were rowhouses.

Completions of New Dwellings, GVRD, 2001

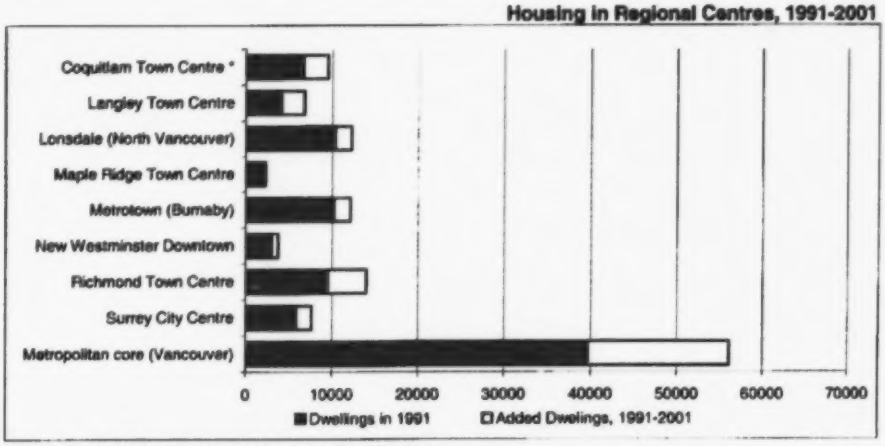


Data Source: Canada Mortgage and Housing Corporation
Indicator Update Frequency: Annual

Indicator	Relevant LRSP Objectives
B2 Number of total and new dwellings in municipal and regional centres and corridors	Seek development of a network of high-quality, mixed-activity urban centres, and achievement of adequate densities in centres and transportation corridors to support planned transit services

The graph below shows additional housing units built in regional centres, 1991-2001. By 2001 these represented 15.1 % of all housing in the region, up from 13.6 % in 1991.

Housing in Regional Centres, 1991-2001



Data Source: Statistics Canada, 1991 and 2001 Census (*Data Source: City of Coquitlam)
Indicator Update Frequency: 5-Year

Indicator	Relevant LRSP Objectives
B3 Benchmark price for housing, by structure type for the region	**Seek a diversity of housing types and costs in each part of the region**

The median price for different types of housing is shown here from 1995 to 2002. This shows that house prices fell from the mid-1990s, but have started to rise slightly in the past three years.

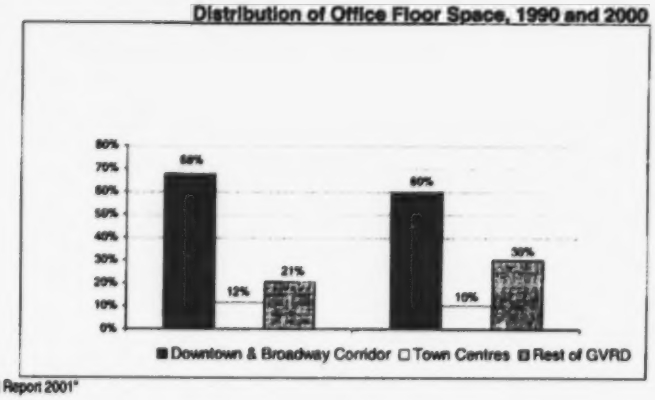
Median House Prices, Greater Vancouver, 1995 – 2002

Data Source: GVRD Key Facts, from Real Estate Board of Greater Vancouver MLS House Price Index, April of each year.
Indicator Update Frequency: Annual

Indicator	Relevant LRSP Objectives
B4 Proportion of office floor area in municipal and regional centres	**Seek development of a network of high-quality, mixed-activity urban centres supported by an appropriate level of public transit and a range of community services and cultural facilities**

Recent data on the numbers of jobs in regional centres is not available. Changes in total inventoried office floor area between 1990 and 2000 indicate that while the Metropolitan Core (downtown Vancouver and Broadway corridor) inventory of office space grew by over 6 million sq.ft.and the rest of the GVRD (excluding regional centres) grew by 7 million sq.ft., the regional town centres grew by only 1 million sq. ft.

Distribution of Office Floor Space, 1990 and 2000

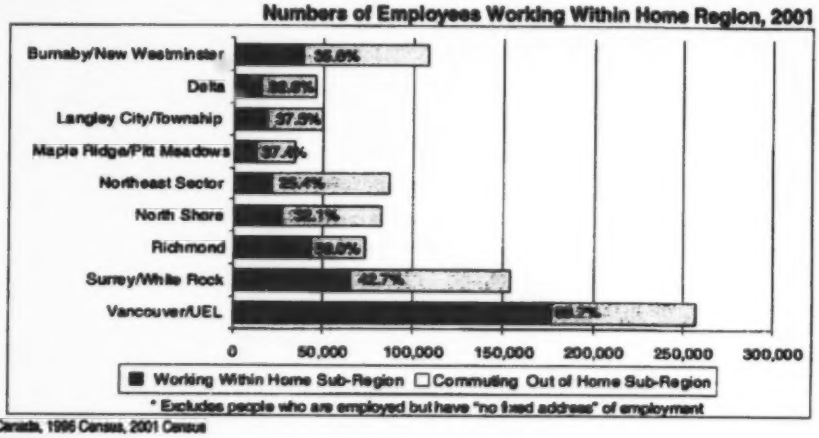


Data Source:Royal LePage "The GVRD Office Market Report 2001"
Indicator Update Frequency: Annual

Indicator	Relevant LRSP Objectives
B5 Proportion of labour force working in home subregion	**Seek a better balance in jobs and labour force location throughout the region**

The graph below shows the numbers of people working within their home subregions. In Vancouver and UEL 68.7% of people work in the same subregion that they live in, but this falls to 25.4% in the Northeast Sector. The total number of residents working in their own subregion rose marginally by 0.8% from 1996 to 2001.

Numbers of Employees Working Within Home Region, 2001



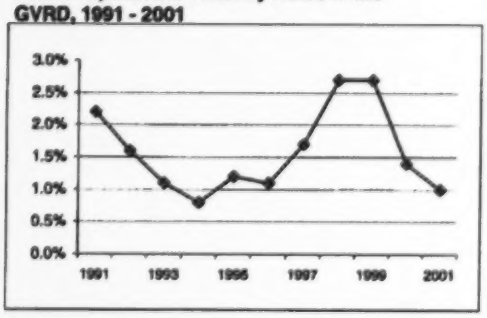
* Excludes people who are employed but have "no fixed address" of employment

Data Source: Statistics Canada, 1996 Census, 2001 Census
Indicator Update Frequency: 5-Year

B6 Proportion of rental housing in region's housing stock	**Seek a diversity of housing tenures in each part of the region**

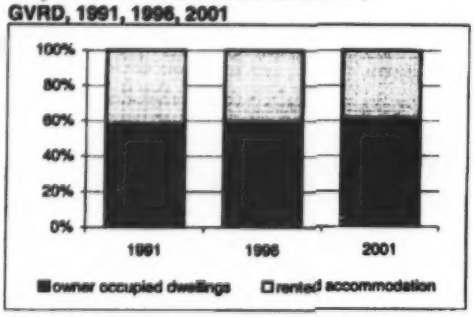
The proportion of rented accommodation in the GVRD has fallen slightly. Low interest rates have facilitated an increase in home ownership over the past five years, while a tight rental market impacts the number of choices for rental households. Rental vacancy rates have decreased to 1.0% in 2001.

Annual Apartment Vacancy Rates in the GVRD, 1991 - 2001



Data Source: Canada Mortgage and Housing Corporation
Indicator Update Frequency: Annual

Proportion of Rented Accommodation, GVRD, 1991, 1996, 2001



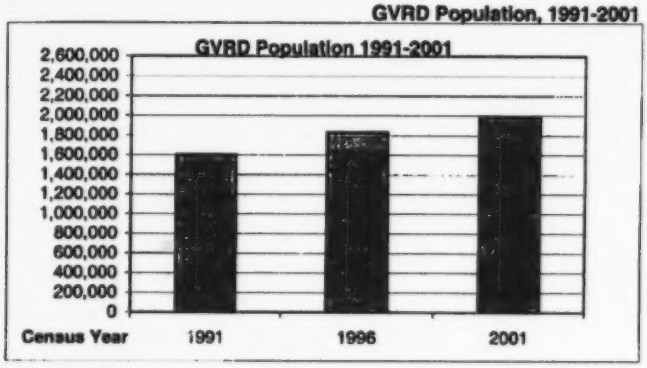
Data Source: Statistics Canada, 1991, 1996, 2001 Census; BC Housing
Indicator Update Frequency: 5-Year

Livable Region Strategic Plan Strategy: ACHIEVE A COMPACT METROPOLITAN REGION

	Indicator	Relevant LRSP Objectives
C1	**Population growth and share of annual population growth, for the Growth Concentration Area and GVRD**	**Seek to achieve population growth management targets for 2021**

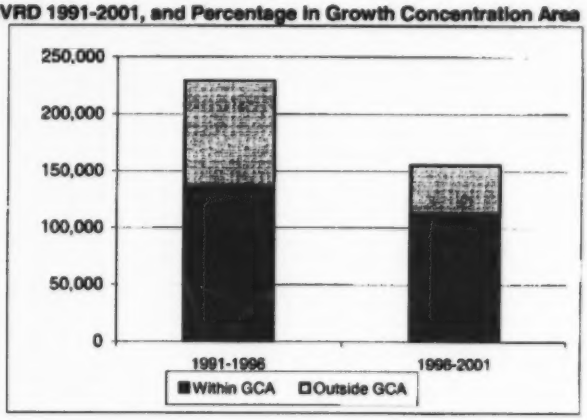
Overall, population has risen from just over 1,500,000 in 1991 to 1,986,965 in 2001. Population growth in recent years was significantly lower than in earlier periods of the decade.

GVRD Population, 1991-2001



The proportion of the population located in the Growth Concentration Area (GCA) of the GVRD is 67%. The GCA accommodated 73% of the region's population growth between 1996 and 2001. Between 1991 and 1996 the GCA accounted for only 60% of the region's population growth.

Additional Residents in GVRD 1991-2001, and Percentage in Growth Concentration Area



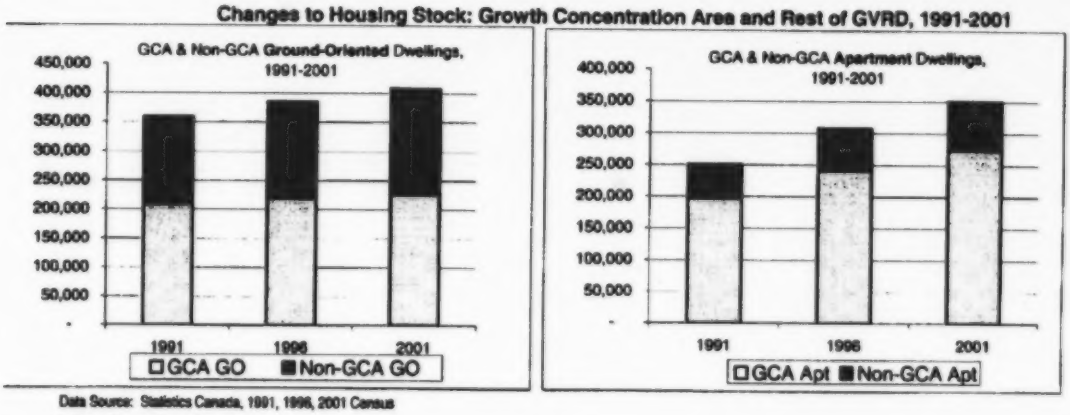
Data Source: Statistics Canada, 1991, 1996, 2001 Census
Indicator Update Frequency: 5-Year

Livable Region Strategic Plan Strategy: ACHIEVE A COMPACT METROPOLITAN REGION

Indicator	Relevant LRSP Objectives
C2 Number and proportion of ground-oriented housing inside and outside the Growth Concentration Area	**Seek further opportunities for ground-oriented housing, particularly in the GCA**

The two sets of graphs below show the additional numbers of apartments and ground-oriented housing added to the housing stock in the GVRD in each of the past 3 Census years. Ground-oriented housing in the Growth Concentration Area (GCA) has increased each year, up from 208,480 units in 1991 to 226,495 units in 2001. The number of apartment units in the GCA as increased from 197,380 units in 1991 to 274,005 units in 2001.

Changes to Housing Stock: Growth Concentration Area and Rest of GVRD, 1991-2001

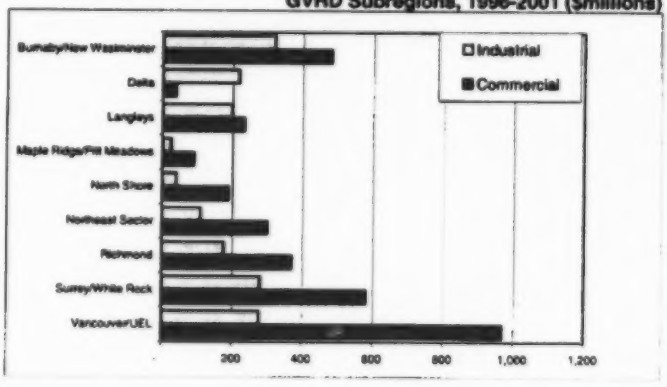


Data Source: Statistics Canada, 1991, 1996, 2001 Census
Indicator Update Frequency: Annual

Indicator	Relevant LRSP Objectives
C3 Non-residential building permit values, for the GVRD subregions	**Seek a distribution of business investment that supports LRSP objectives**

Commercial and industrial development has followed a different pattern to that of housing. At present, it is not possible to quantify commercial and industrial development inside the Growth Concentration Area but this may change in the future. The graph below shows commercial and industrial development by GVRD Subregions.

Building Permit Values, Commercial and Industrial Development, GVRD Subregions, 1996-2001 ($millions)

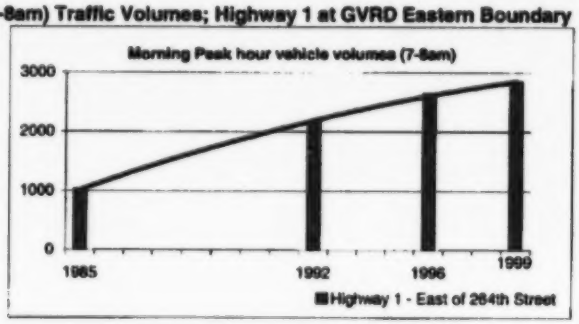


Data Source: GVRD Regional Development
Indicator Update Frequency: Annual

	Indicator	Relevant LRSP Objectives
C4	**Number of vehicles crossing the GVRD eastern boundary, in-bound**	**Seek travel levels across the GVRD eastern boundary that are consistent with development of complete communities in the Fraser Valley**

Statistics showing the numbers of vehicles crossing all the eastern boundary roads are not available for 1999, but the data for Highway 1 represents around 65% of all traffic crossing the eastern boundary. The graph shows that while there has been an increase in traffic volumes, the rate of increase has been less for commuting into Greater Vancouver from further east in the Fraser Valley.

Morning Peak (7-8am) Traffic Volumes; Highway 1 at GVRD Eastern Boundary

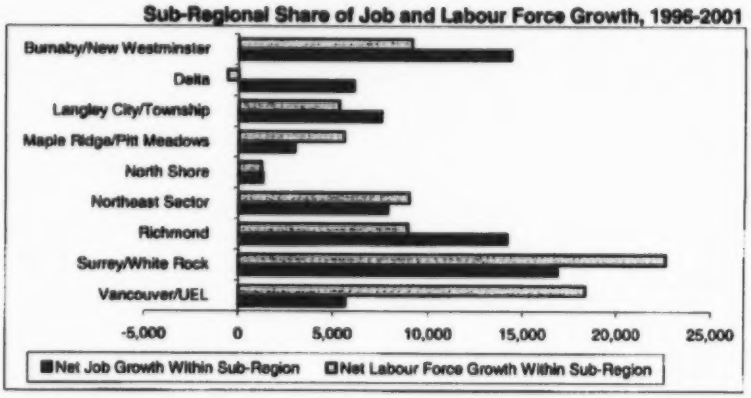


Data Source: Greater Vancouver Transportation Authority (GVTA)
Indicator Update Frequency: 5-Year

	Indicator	Relevant LRSP Objectives
C5	**Total employment and share of employment growth, for the GCA and GVRD**	**Seek to achieve employment growth management targets for 2006 and 2021**

Total employment within the GCA and GVRD is not yet available from the 2001 Census. The table below shows net job growth and net labour force growth by sub-region from 1996 to 2001.

Sub-Regional Share of Job and Labour Force Growth, 1996-2001



Data Source:
Statistics Canada, 2001 Census
Indicator Update Frequency: 5-year

	Indicator	Relevant LRSP Objectives
C8	**Growth in regional sewerage trunk lines, for the GCA and GVRD**	**Implement the LRSP through delivery of GVRD services**

Information is available to cover this indicator, but it includes replacement of older sewers as well as new pipes. As an alternative indicator, adjustments to the sewer area boundaries are tracked.

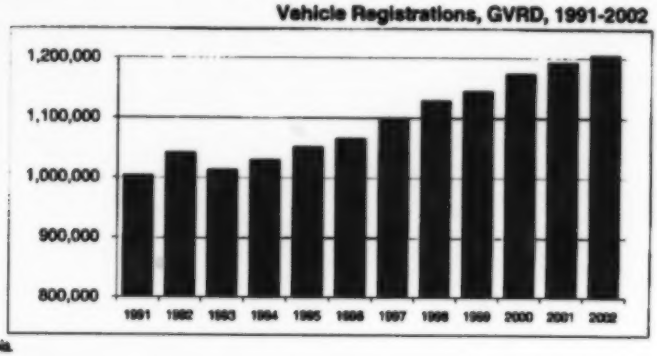
The legal sewerage area boundary has increased by 1249 ha since 1995. Nearly all of this expansion occurred in the Fraser Sewerage Area which is now roughly 65,230 ha. (about two thirds of all the area covered by the sewerage system in Greater Vancouver). This represents a 1.9% growth in 5 years.

Data Source: GVRD Regional Utility Planning
Indicator Update Frequency: Annual

Livable Region Strategic Plan Strategy: INCREASE TRANSPORTATION CHOICE	
Indicator	**Relevant LRSP Objectives**
T1 Total and per capita number of vehicle kilometres driven	**Increase transportation choices to reduce automobile-dependence**

The total number of vehicles registered in the Region is thought to give a good indication of the total kilometers driven. GVTA estimates the per capita daily vehicle kilometres travelled to be 23 kilometres.

Vehicle Registrations, GVRD, 1991-2002

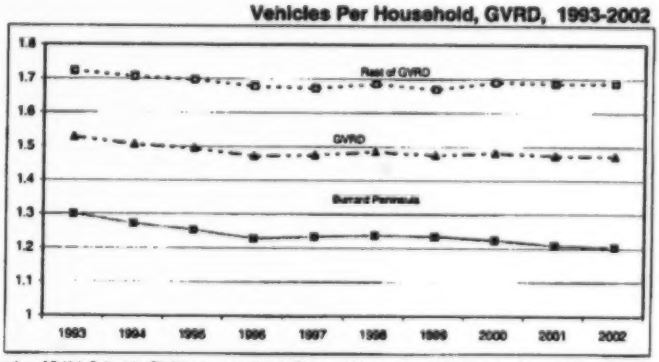


Data Source: Insurance Corporation of British Columbia.
Indicator Update Frequency: Annual

T2 Vehicle ownership per household	**Increase transportation choices to reduce automobile-dependence**

Vehicle ownership per household has remained at almost the same level for the past five years, although the past year showed a slight increase in vehicle ownership rates compared to population growth.

Vehicles Per Household, GVRD, 1993-2002



Data Source: BC Stats PEOPLE 25; Insurance Corporation of British Columbia (Pitt Meadows and Maple Ridge vehicle numbers 1992-95 derived from 1991 and 1996 statistics)
Indicator Update Frequency: Annual

Livable Region Strategic Plan Strategy: INCREASE TRANSPORTATION CHOICE		
	Indicator	**Relevant LRSP Objectives**
T3	**Participation in regional ride-share program**	**Pursue transportation demand management strategies**

In the month of November 2002, the Jack Bell Foundation reported 90 car/van pools in operation, up from 75 in 2000. The total number of passenger trips in November 2002 was 24,040. In addition, the Foundation has 5 van pools in operation providing a shuttle service between the University Hospital, Vancouver General Hospital, and St. Pauls Hospital.

Data Source: GVTA and Jack Bell Foundation
Indicator Update Frequency: Annual

T4	**Lane-kilometres of major road network**	**Plan and implement an automobile-restrained transportation system**

The regional road network is comprised of about 2,200 lane kilometers of roadways.

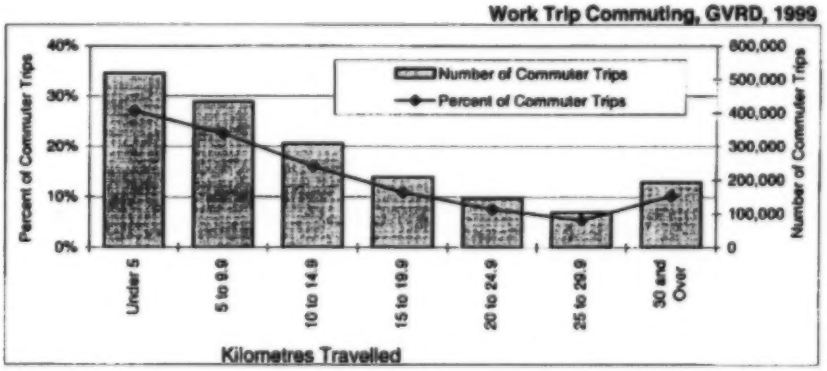
Data Source: GVTA
Indicator Update Frequency: Annual

T5	**Kilometres of streets with sidewalks and kilometres of bike lanes**	**Seek enhancements to local streets to favour transit, bicycle and pedestrian uses**

No statistics exist on the length of streets with sidewalks. No satisfactory source of information has been identified which includes a measurement of the length of bike lanes.

T6	**Commuter trip length and time**	**Seek a better balance of jobs and labour force throughout the region**

Work Trip Commuting, GVRD, 1999

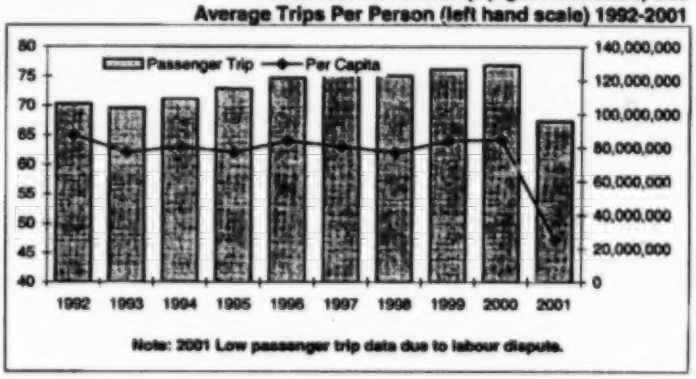


Data Source: GVTA, 1999 Trip Diaries

Livable Region Strategic Plan Strategy: INCREASE TRANSPORTATION CHOICE	
Indicator	**Relevant LRSP Objectives**
T7 Total and per capita transit ridership	**Plan and implement a transit-oriented transportation system**

Use of the transit system (per capita ridership) has remained steady for five years, with a slight increase in 1999/2000. The total number of trips taken - (paid journeys) - has increased at a rate that approximates to the overall population increase in recent years. Low ridership figures for 2001 are due to a 4 month long labour dispute.

Total Transit Ridership (right hand scale) and Average Trips Per Person (left hand scale) 1992-2001

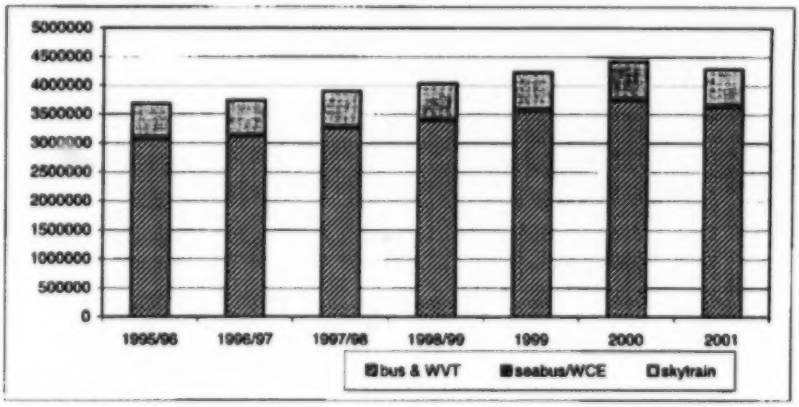


Data Source: BC Stats PEOPLE 25; GVTA
Indicator Update Frequency: Annual

T8 Growth in total and per capita transit capacity	**Plan and implement a transit-oriented transportation system**

Bus and SkyTrain capacity in 2001 decreased slightly as a result of a funding shortfall.

Increase in Capacity of Transit System, 1995/6 to 2001 (Total Annual Service Hours)

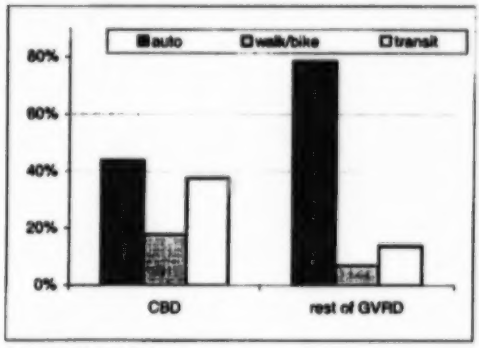


Data Source: GVTA
Indicator Update Frequency: Annual
Note: SeaBus and Westcoast Express figures are included, but are too small to appear on this graph.

Indicator	Relevant LRSP Objectives
T9 Mode split	Increase transportation choice and implement a transit-oriented transportation system

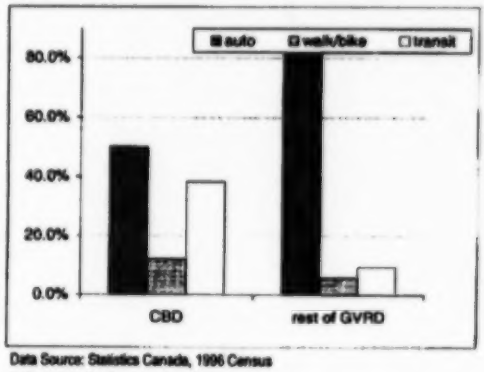
Figures for 1999 are from GVTA. Census data from 1996 the mode split for journeys to work are shown for the Metropolitan Core (Downtown Vancouver and the Broadway Corridor) and the rest of Greater Vancouver. Automobile use as a method of travel for journey to work has decreased, both in the CBD and the rest of the GVRD. The trip diary survey conducted in 1999 showed an increase in the numberof morning peak trips on transit, from 11.3% in 1994 to 12.5% in 1999.

Journey to Work Trip Diary, 1999



Source: GVTA, 1999 Trip diary
Indicator Update Frequency: 5-Year

Journey to Work: Census, 1996

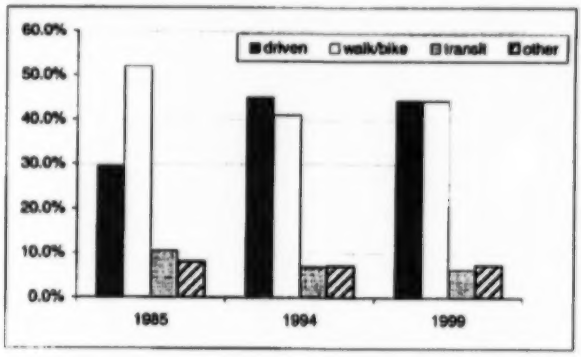


Data Source: Statistics Canada, 1996 Census
Indicator Update Frequency: 5-Year

Indicator	Relevant LRSP Objectives
T10 Proportion of children walking to school versus using other transportation modes	Provide a variety of local transit services and networks in support of complete communities

The proportion of children walking/biking to school in the morning and afternoon increased slightly between 1994 and 1999, but is still substantially lower than the 53% walking/biking to school in 1985.

Proportion of Children Driven to School vs. Other Transportation Modes, GVRD, 1985,1994,1999



Data Source: GVTA
Indicator Update Frequency: 5-Year